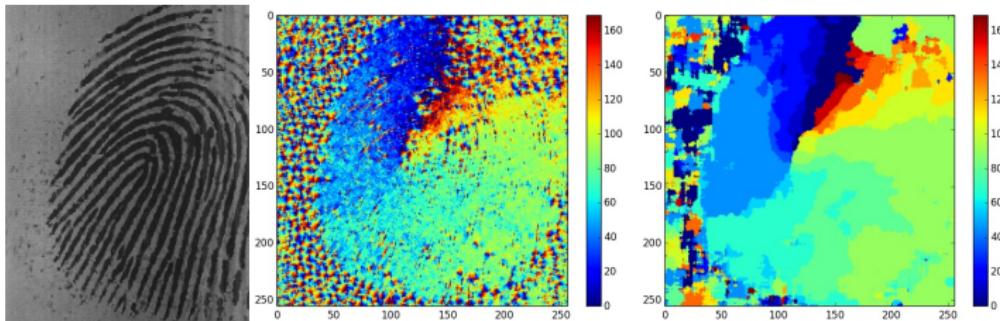


MC920: Introdução ao Processamento de Imagem Digital

Martin de Oliveira (118077) Rafael Hermano (121286)

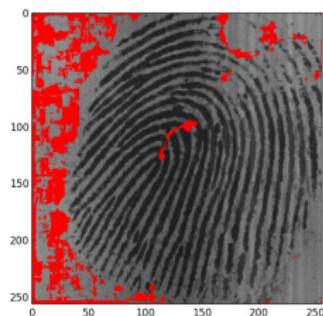
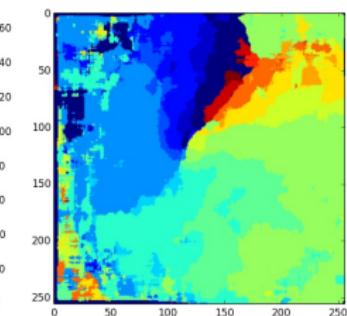
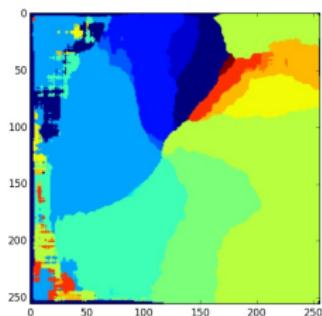
23 de junho de 2014



(a) Original

(b) Info. Direcional

(c) Janela 15x15



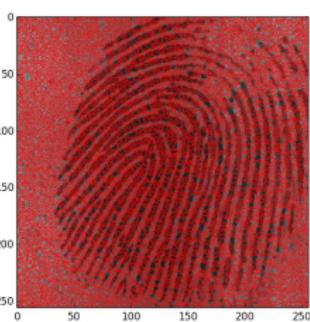
(d) Janela 45x45

(e) Retificado

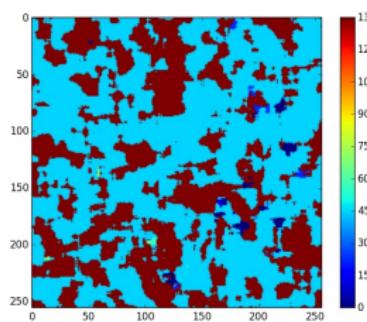
(f) Pixels retificados



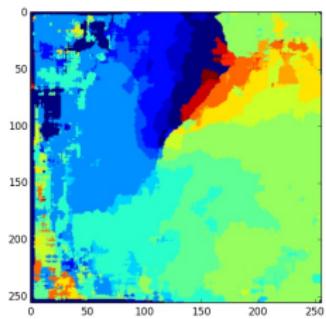
(a) Original



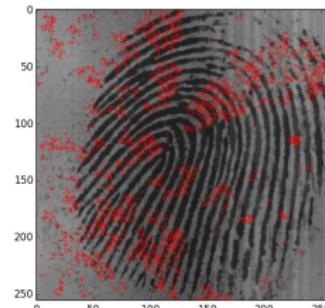
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



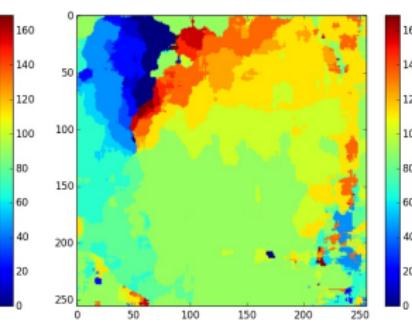
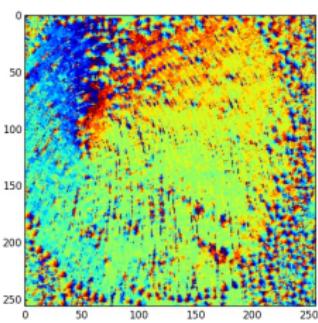
(e) Marcadores



(a) Original



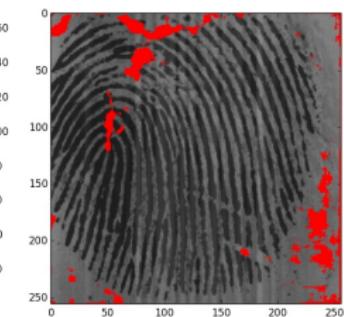
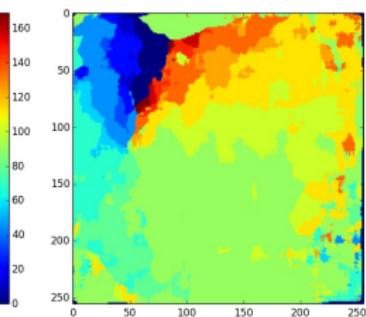
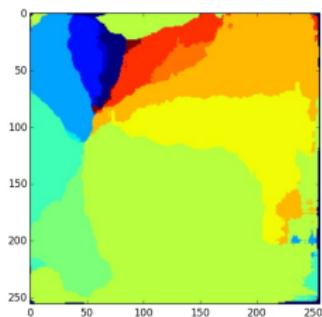
(b) Resultado final



(a) Original

(b) Info. Direcional

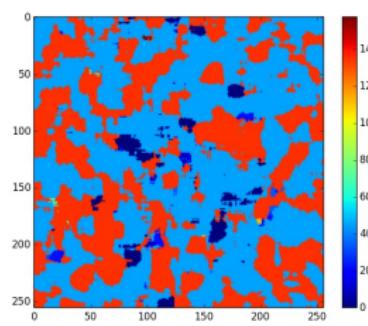
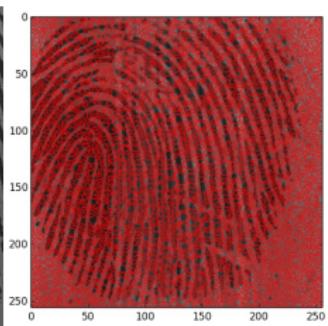
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

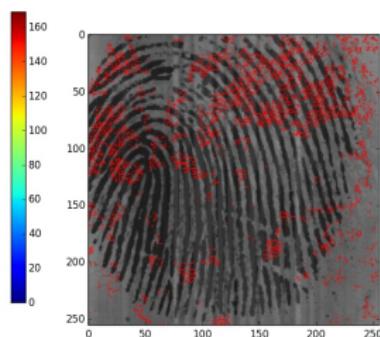
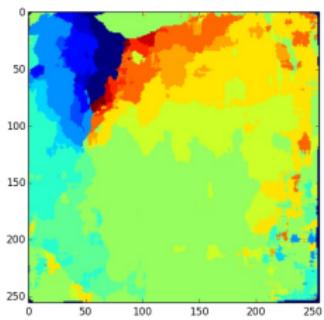
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

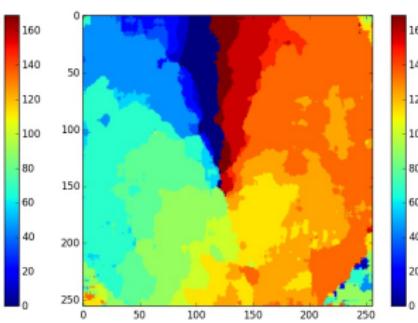
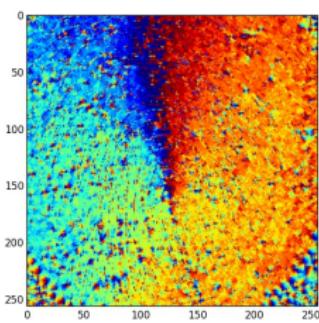
(e) Marcadores



(a) Original



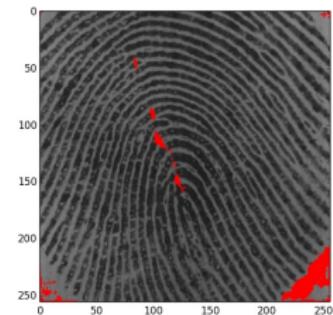
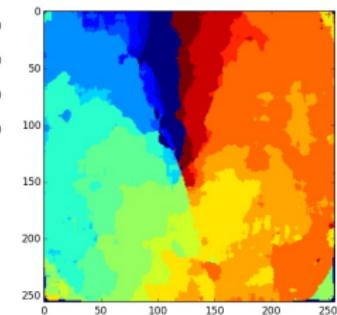
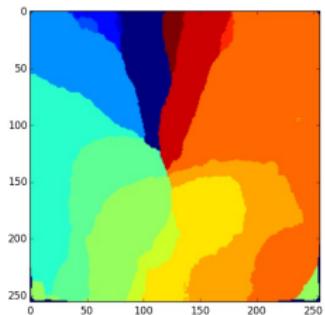
(b) Resultado final



(a) Original

(b) Info. Direcional

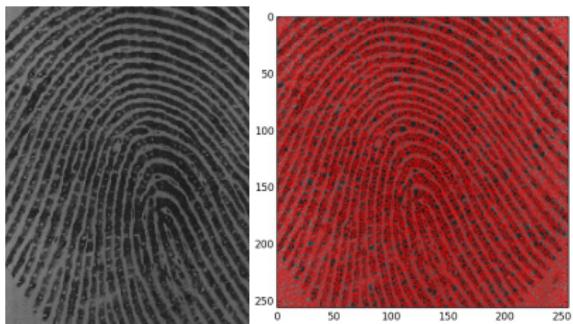
(c) Janela 15x15



(d) Janela 45x45

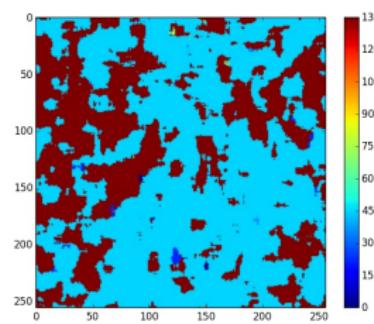
(e) Retificado

(f) Pixels retificados

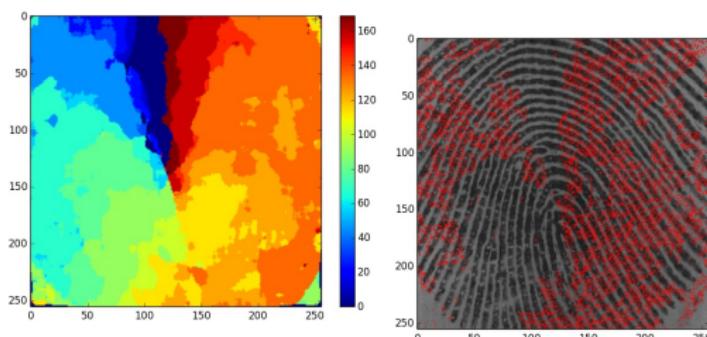


(a) Original

(b) Watershed

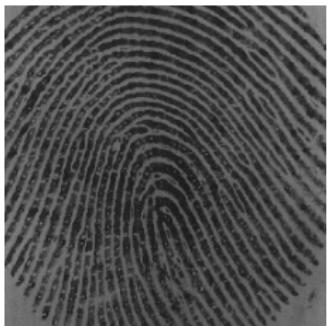


(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

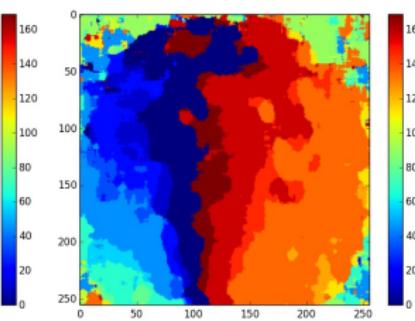
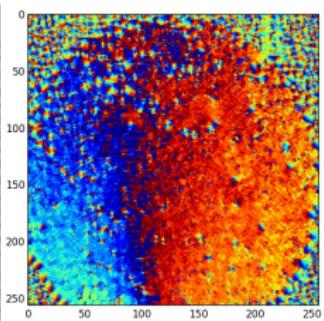
(e) Marcadores



(a) Original



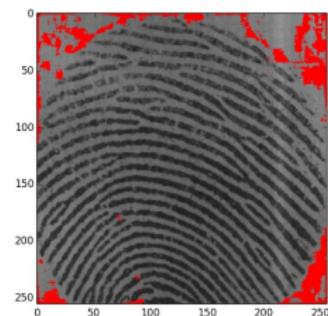
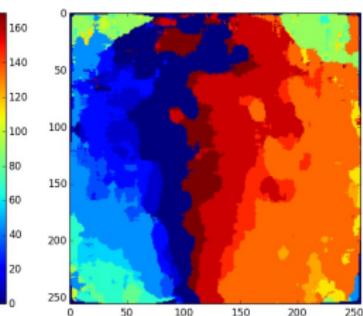
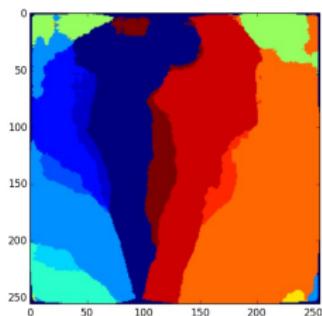
(b) Resultado final



(a) Original

(b) Info. Direcional

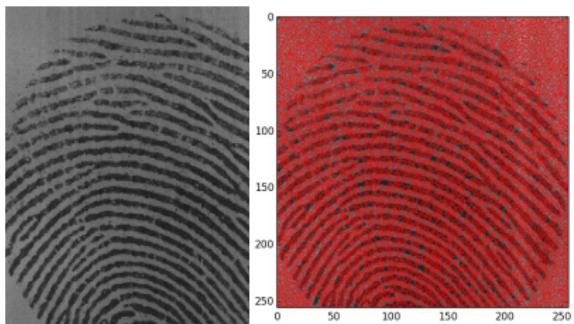
(c) Janela 15x15



(d) Janela 45x45

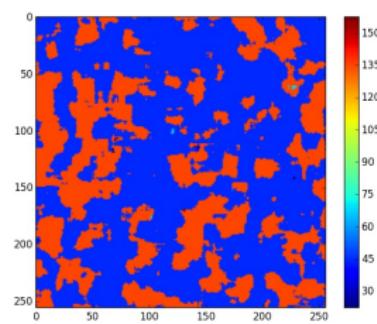
(e) Retificado

(f) Pixels retificados

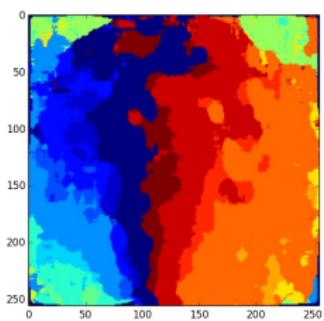


(a) Original

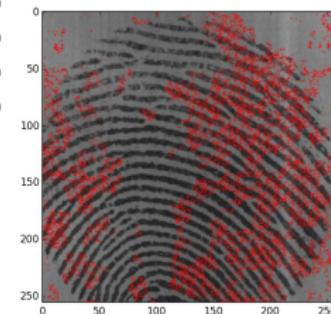
(b) Watershed



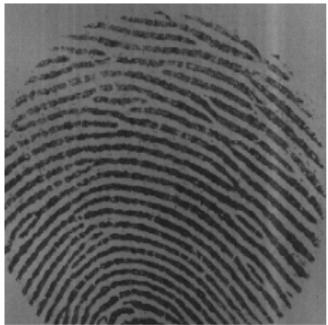
(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



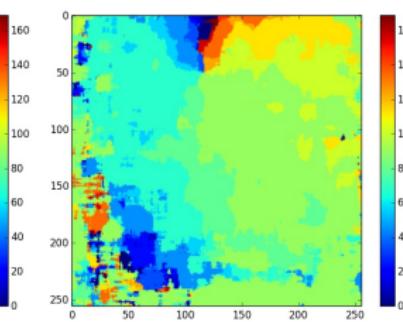
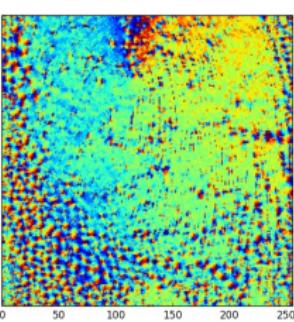
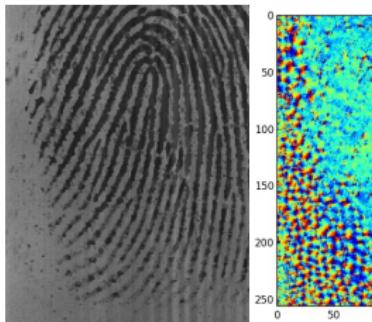
(e) Marcadores



(a) Original



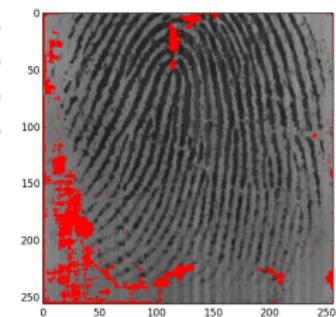
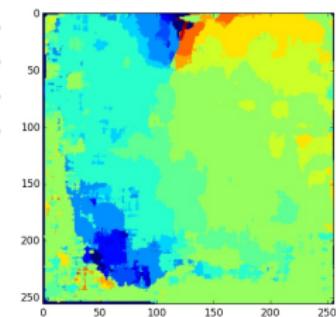
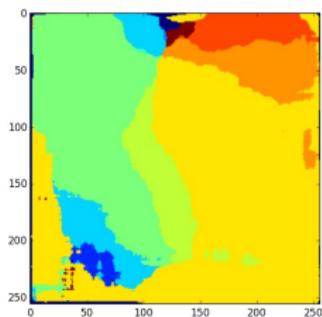
(b) Resultado final



(a) Original

(b) Info. Direcional

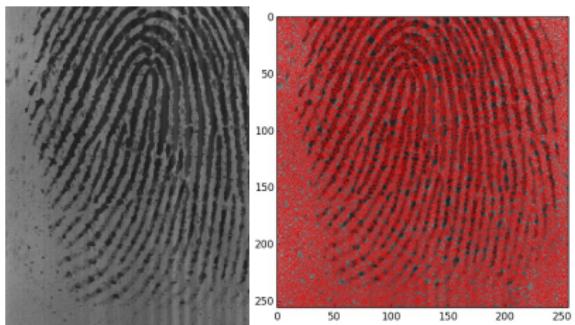
(c) Janela 15x15



(d) Janela 45x45

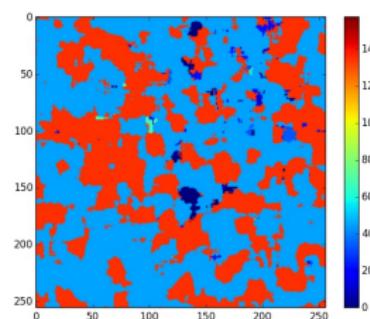
(e) Retificado

(f) Pixels retificados

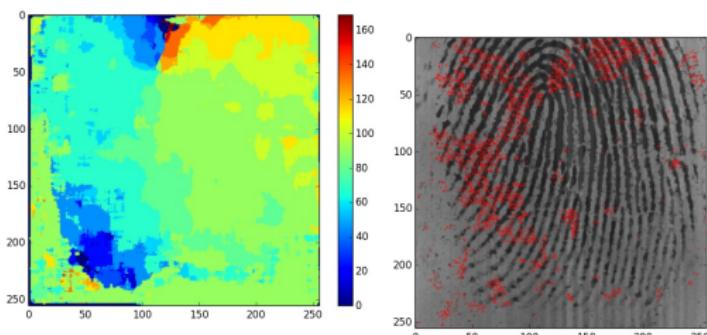


(a) Original

(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

(e) Marcadores



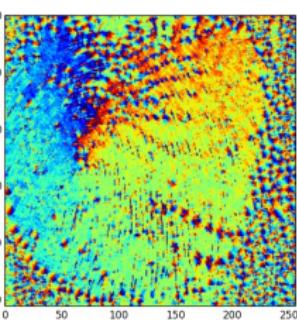
(a) Original



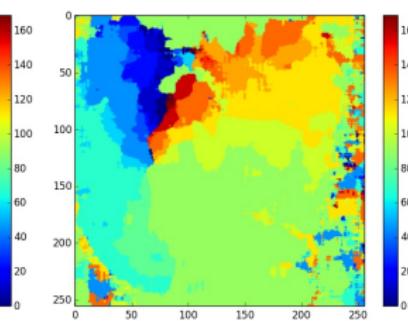
(b) Resultado final



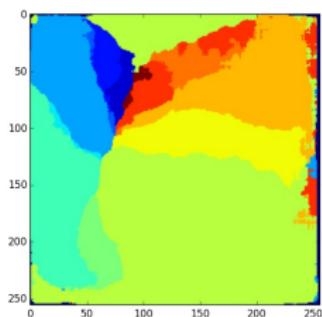
(a) Original



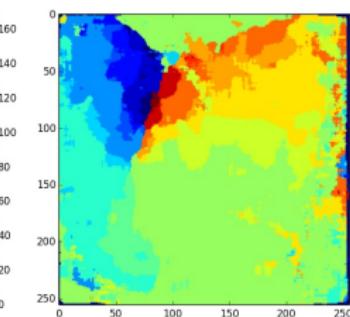
(b) Info. Direcional



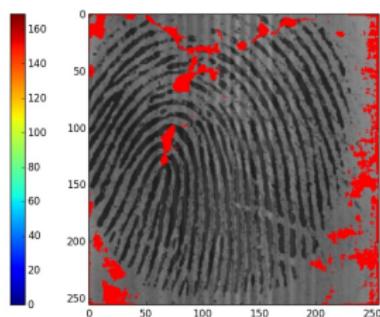
(c) Janela 15x15



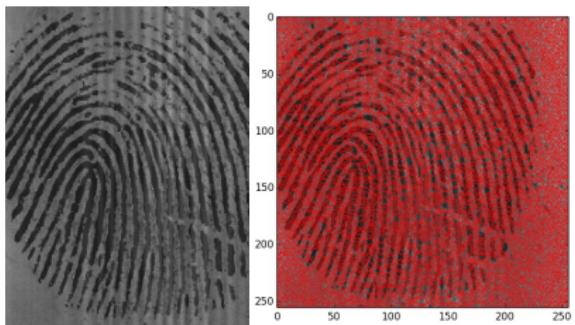
(d) Janela 45x45



(e) Retificado

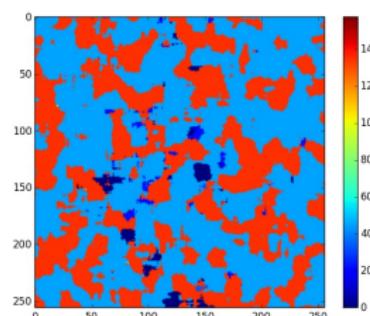


(f) Pixels retificados

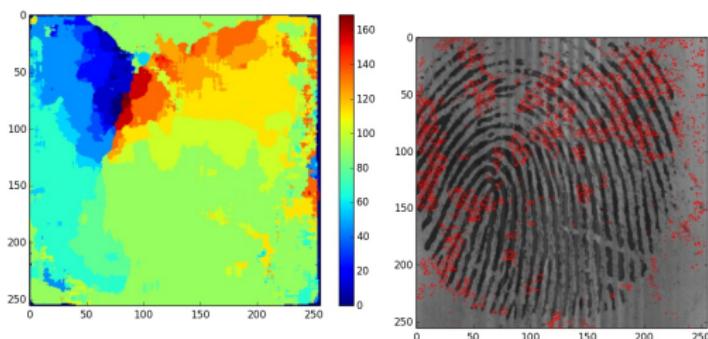


(a) Original

(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

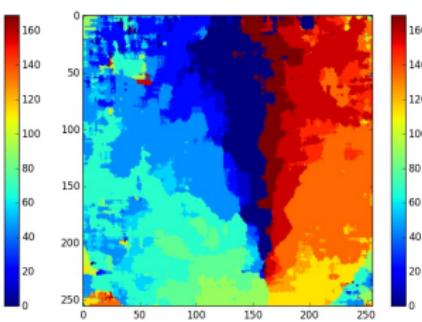
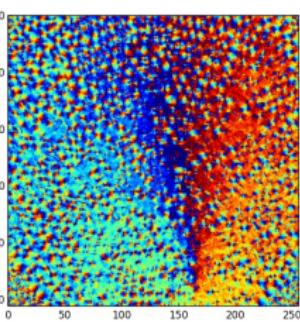
(e) Marcadores



(a) Original



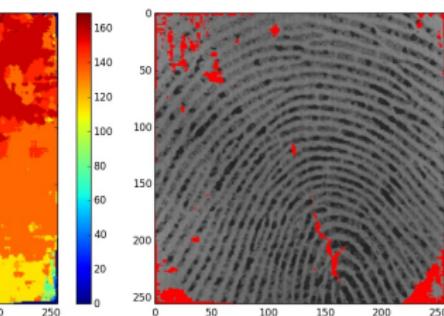
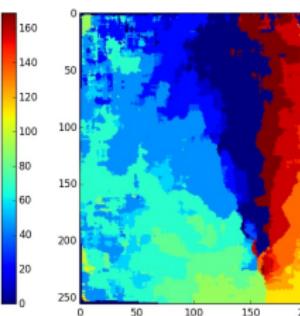
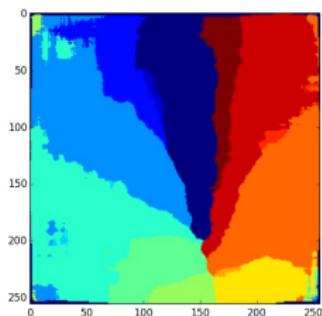
(b) Resultado final



(a) Original

(b) Info. Direcional

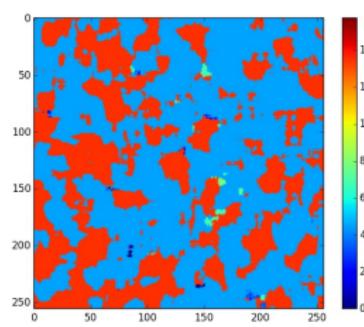
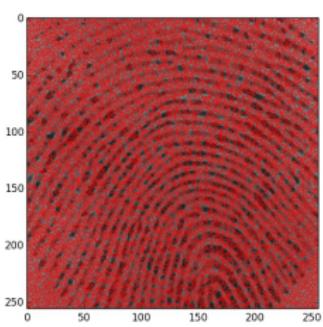
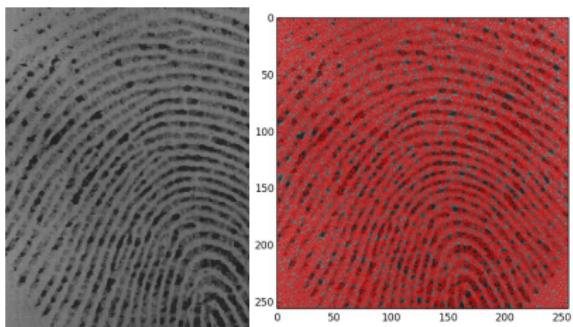
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

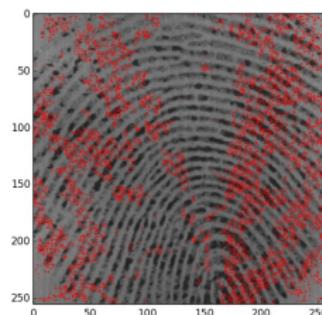
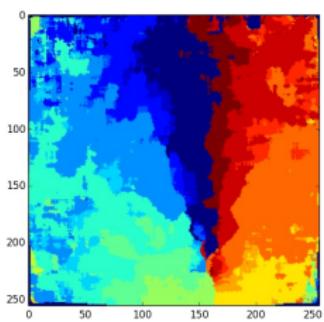
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

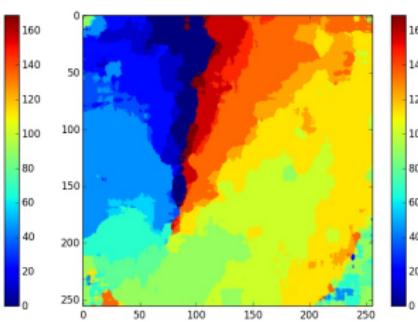
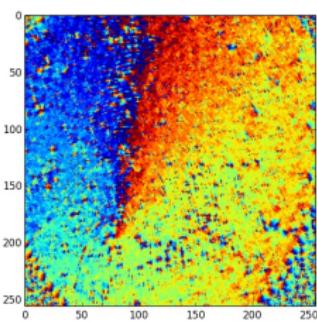
(e) Marcadores



(a) Original



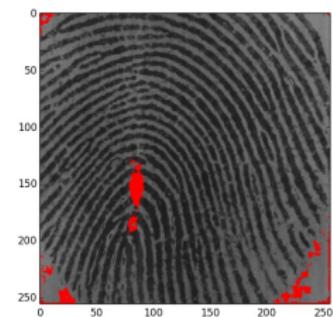
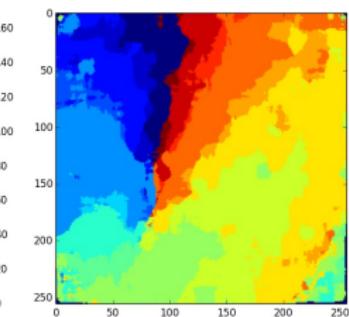
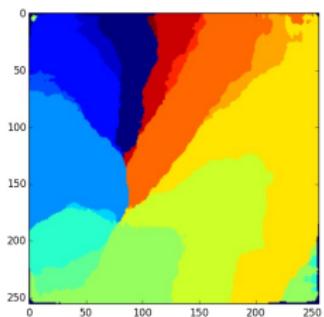
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



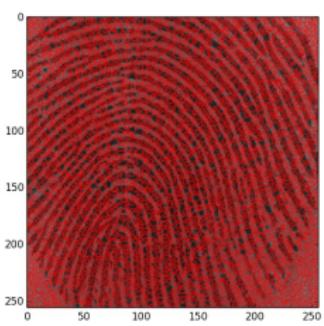
(d) Janela 45x45

(e) Retificado

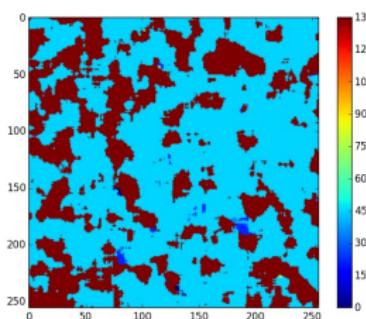
(f) Pixels retificados



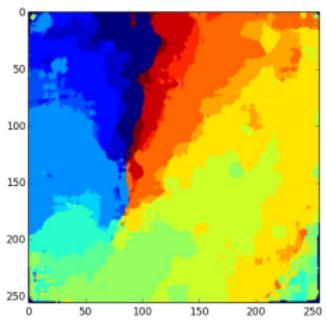
(a) Original



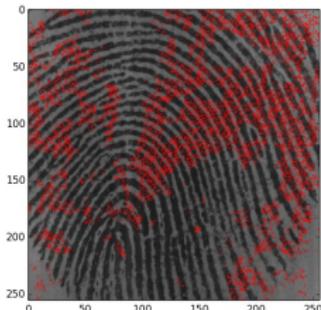
(b) Watershed



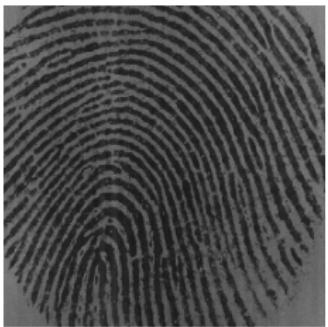
(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



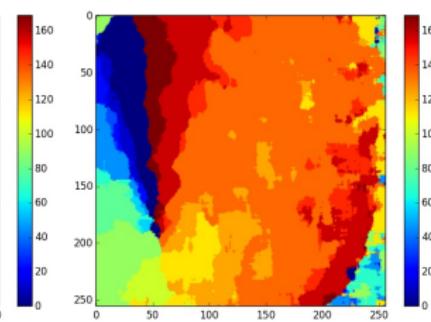
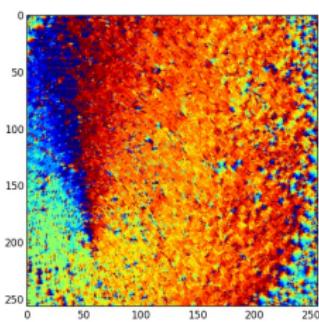
(e) Marcadores



(a) Original



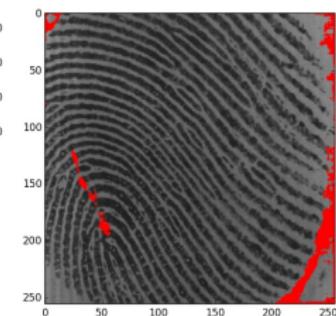
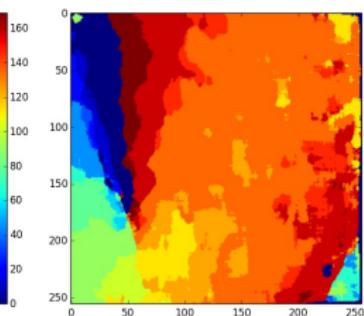
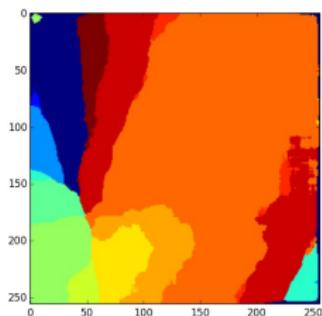
(b) Resultado final



(a) Original

(b) Info. Direcional

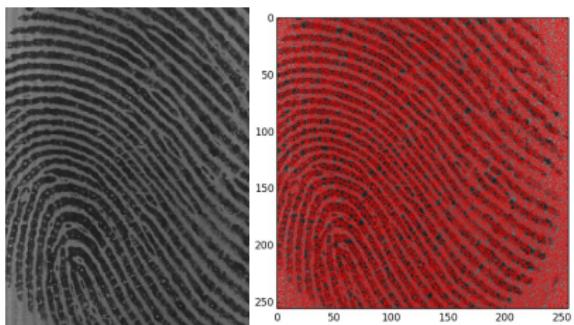
(c) Janela 15x15



(d) Janela 45x45

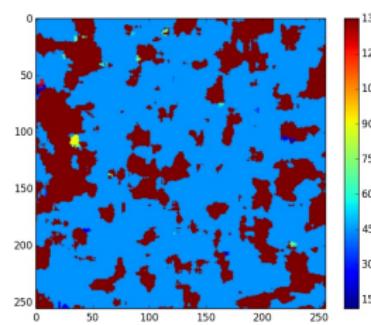
(e) Retificado

(f) Pixels retificados

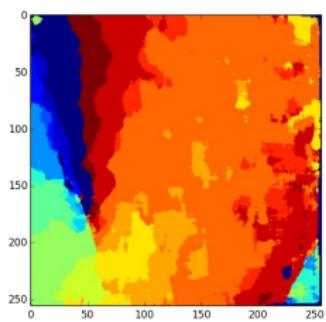


(a) Original

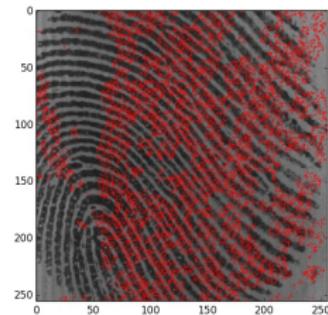
(b) Watershed



(c) Direção watershed



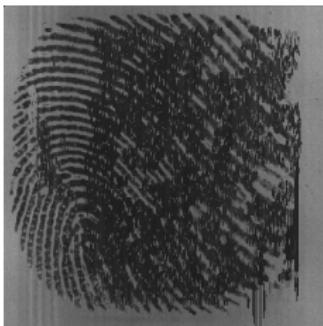
(d) Info. Direcional
retificada (fig. original)



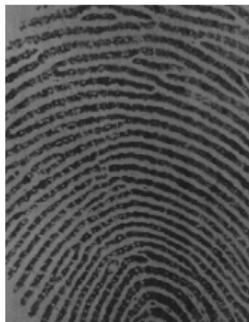
(e) Marcadores



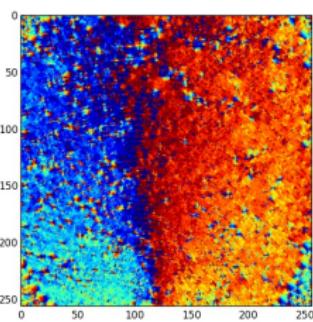
(a) Original



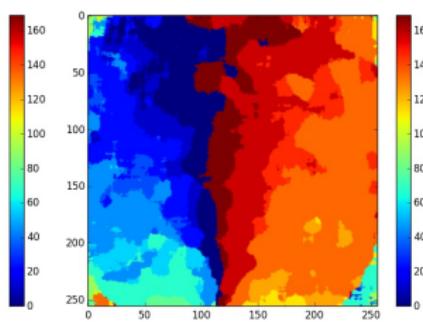
(b) Resultado final



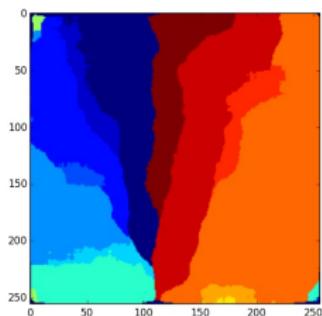
(a) Original



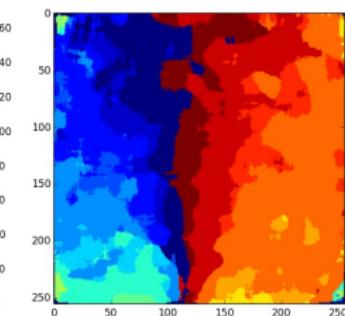
(b) Info. Direcional



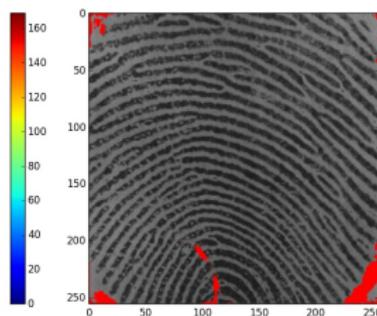
(c) Janela 15x15



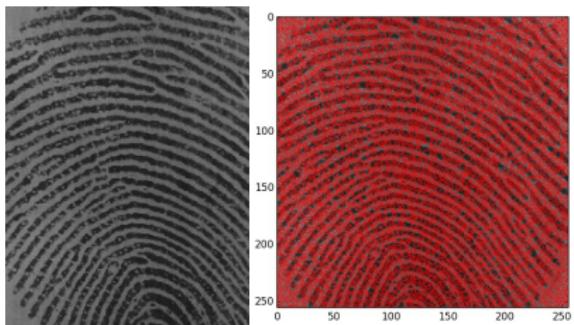
(d) Janela 45x45



(e) Retificado

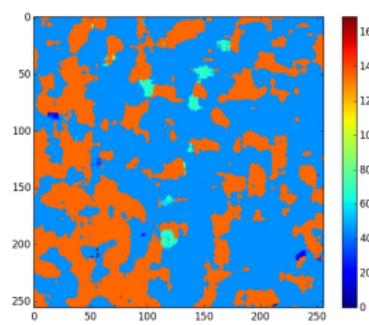


(f) Pixels retificados

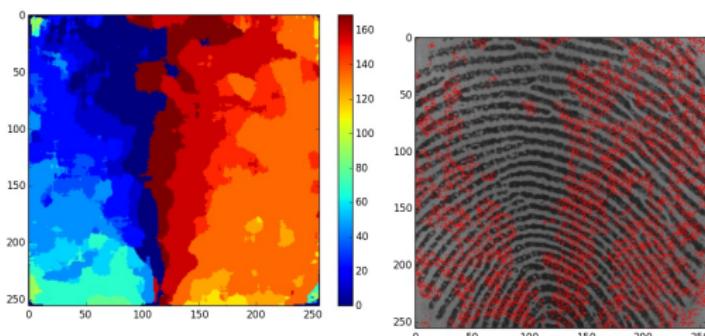


(a) Original

(b) Watershed

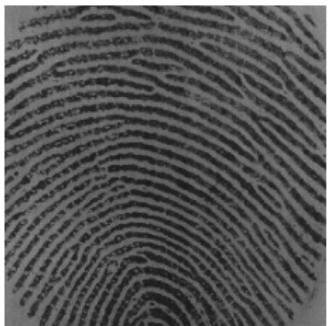


(c) Direção watershed

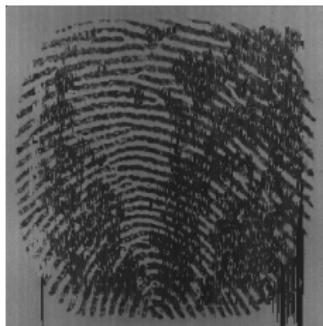


(d) Info. Direcional
retificada (fig. original)

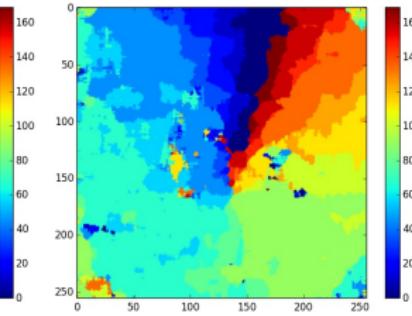
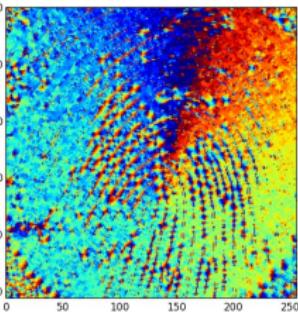
(e) Marcadores



(a) Original



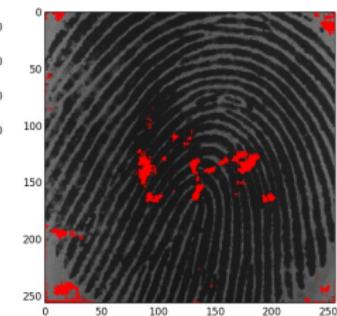
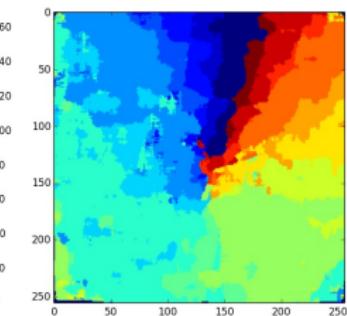
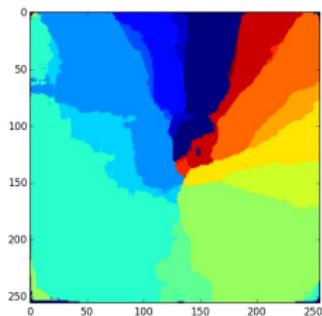
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



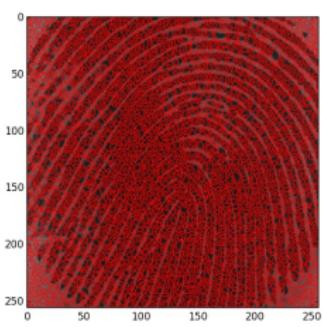
(d) Janela 45x45

(e) Retificado

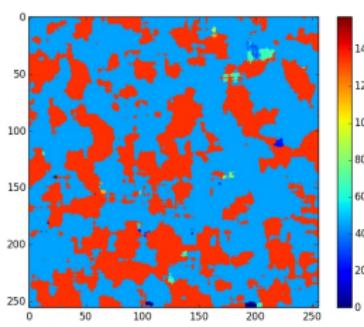
(f) Pixels retificados



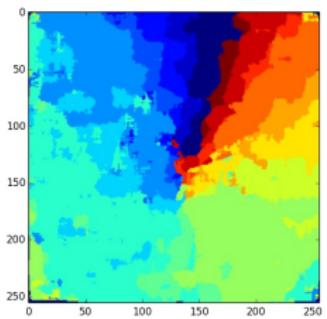
(a) Original



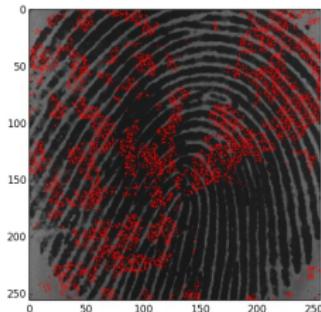
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



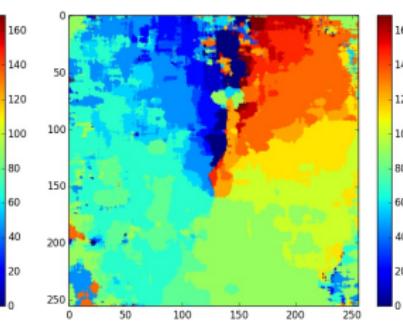
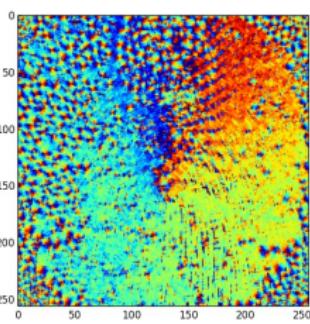
(e) Marcadores



(a) Original



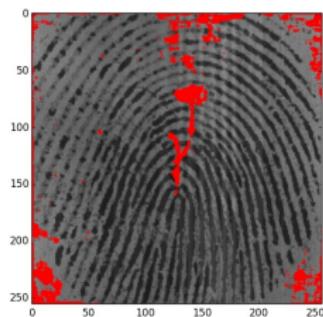
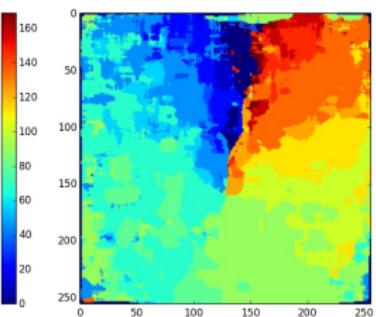
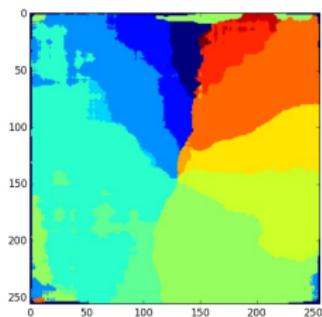
(b) Resultado final



(a) Original

(b) Info. Direcional

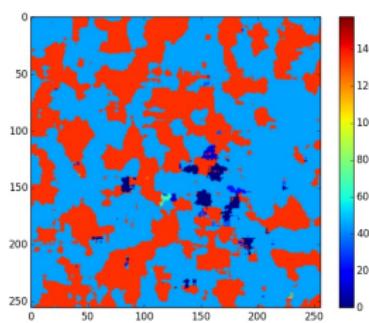
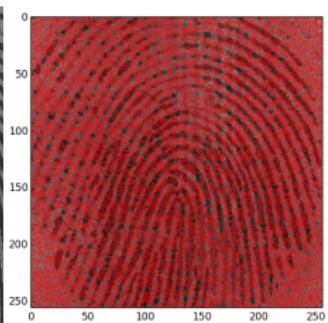
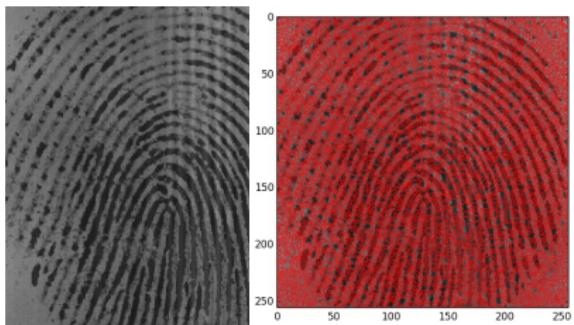
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

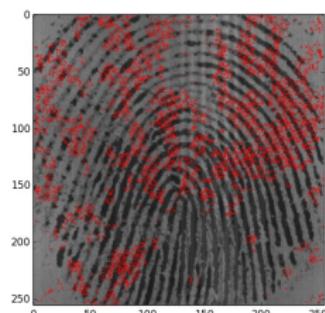
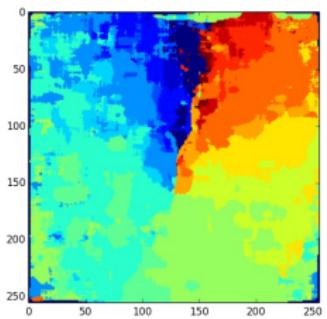
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

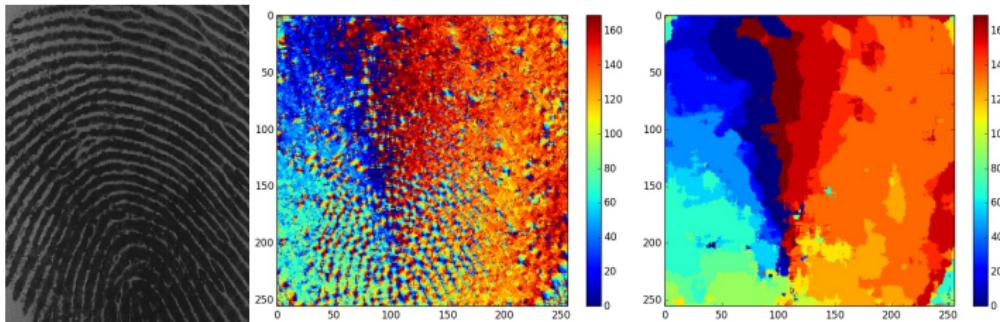
(e) Marcadores



(a) Original



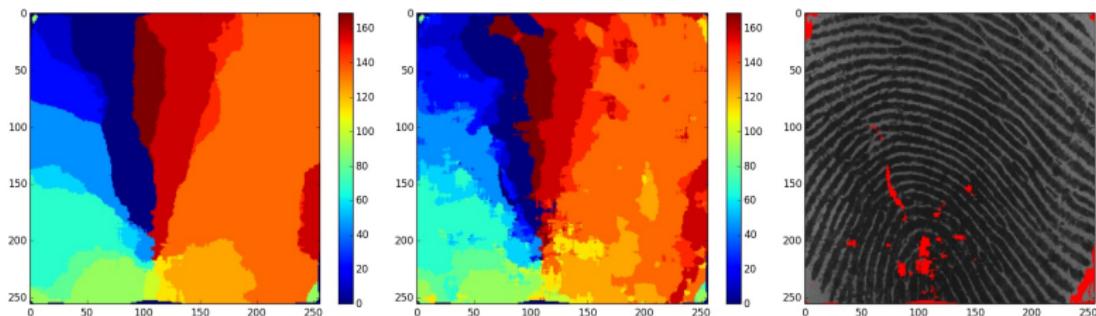
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



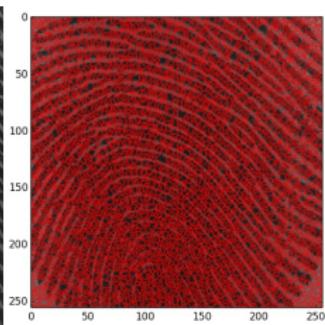
(d) Janela 45x45

(e) Retificado

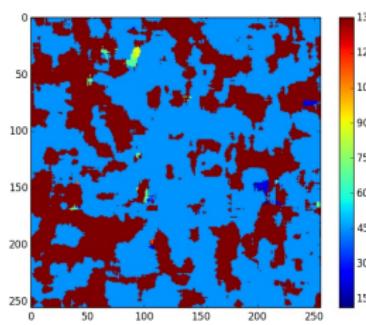
(f) Pixels retificados



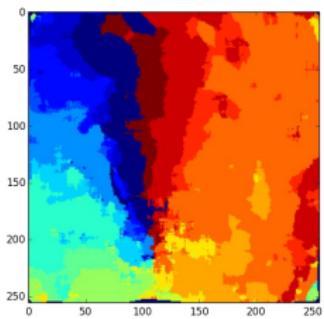
(a) Original



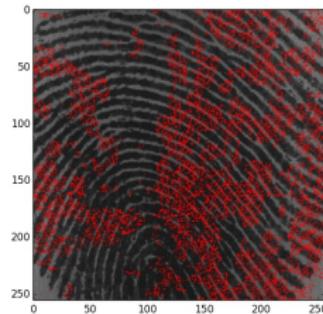
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



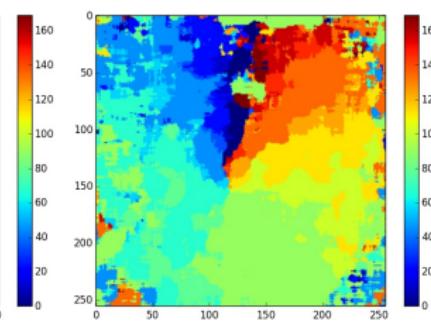
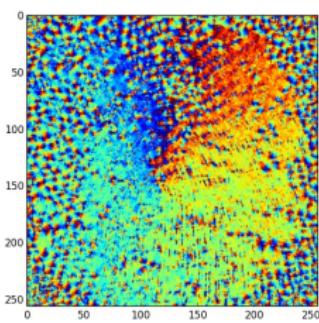
(e) Marcadores



(a) Original



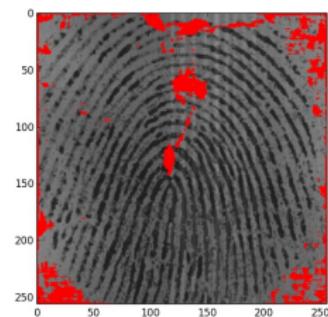
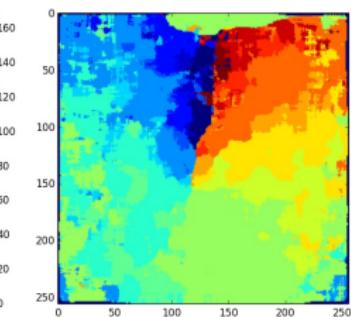
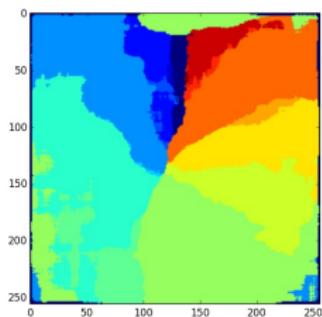
(b) Resultado final



(a) Original

(b) Info. Direcional

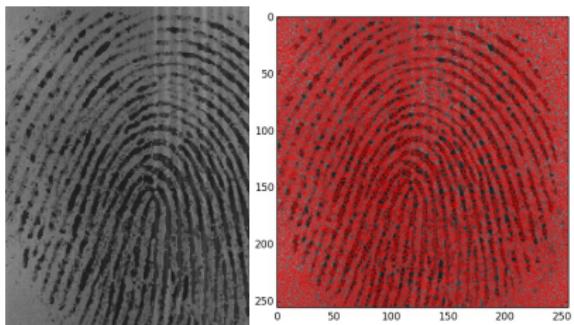
(c) Janela 15x15



(d) Janela 45x45

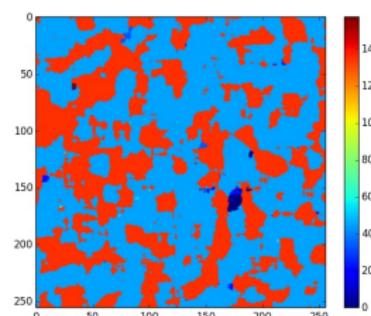
(e) Retificado

(f) Pixels retificados

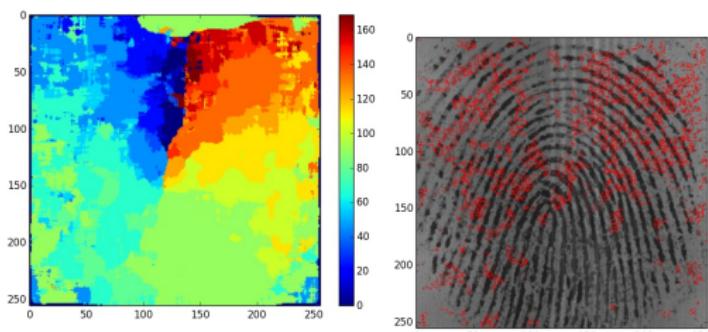


(a) Original

(b) Watershed

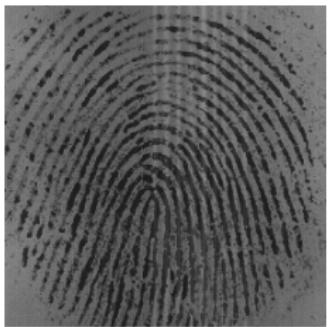


(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

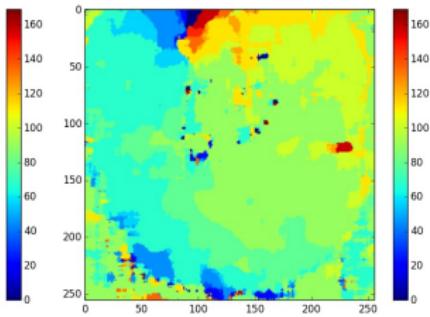
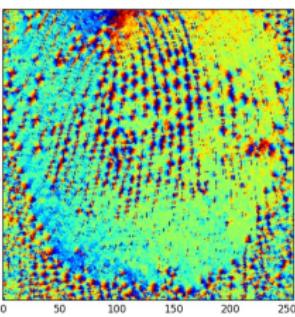
(e) Marcadores



(a) Original



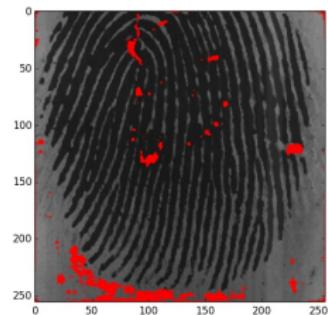
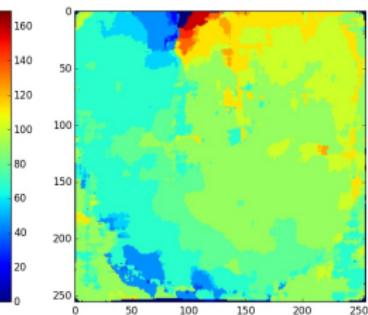
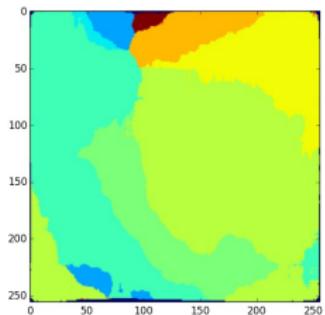
(b) Resultado final



(a) Original

(b) Info. Direcional

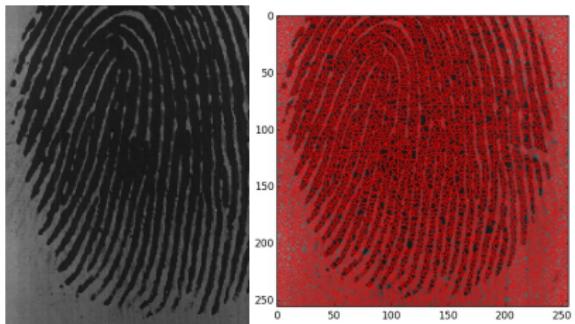
(c) Janela 15x15



(d) Janela 45x45

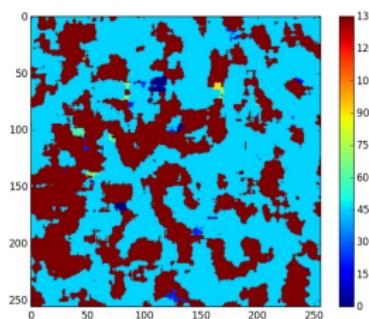
(e) Retificado

(f) Pixels retificados

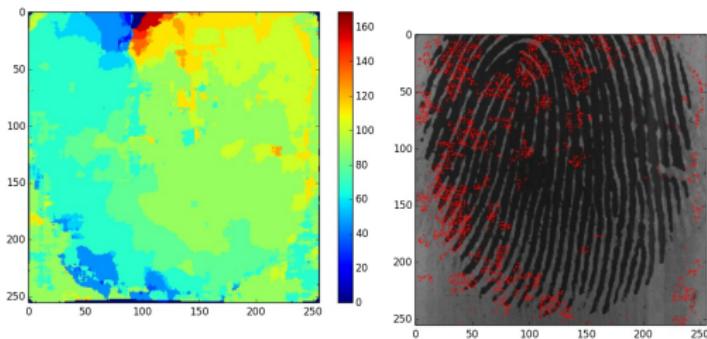


(a) Original

(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

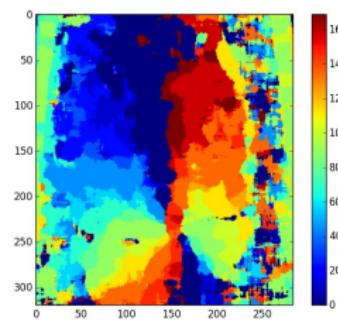
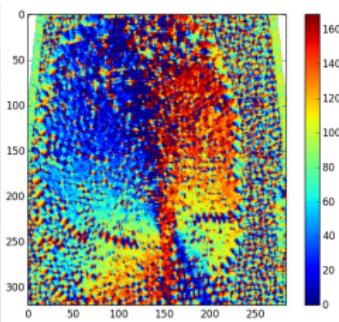
(e) Marcadores



(a) Original



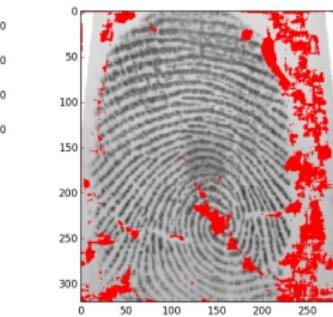
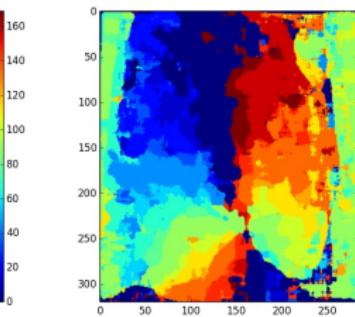
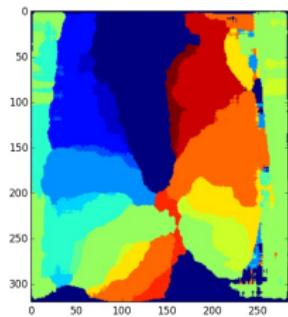
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



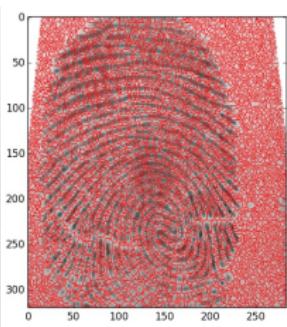
(d) Janela 45x45

(e) Retificado

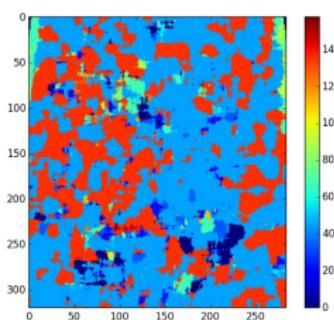
(f) Pixels retificados



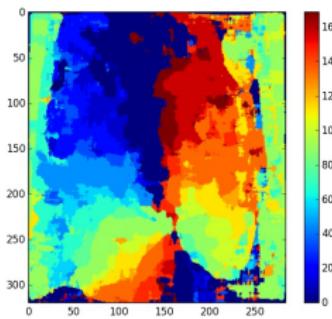
(a) Original



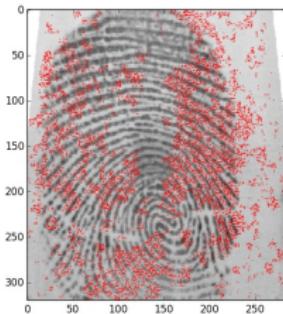
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



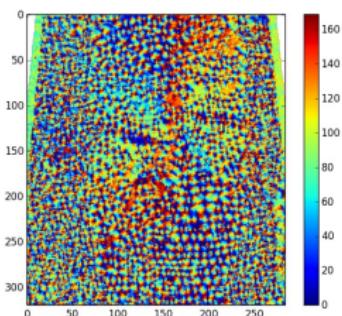
(a) Original



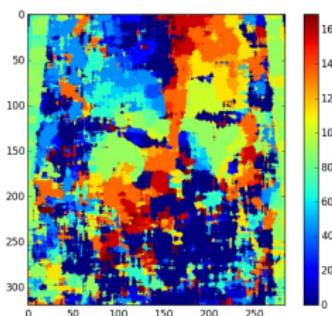
(b) Resultado final



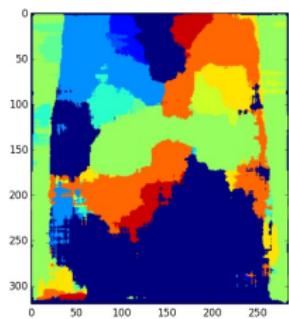
(a) Original



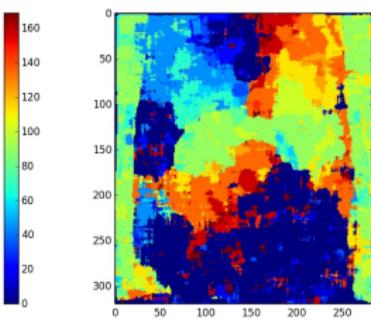
(b) Info. Direcional



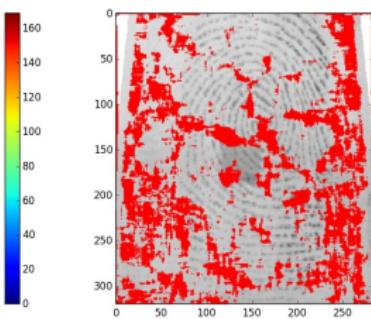
(c) Janela 15x15



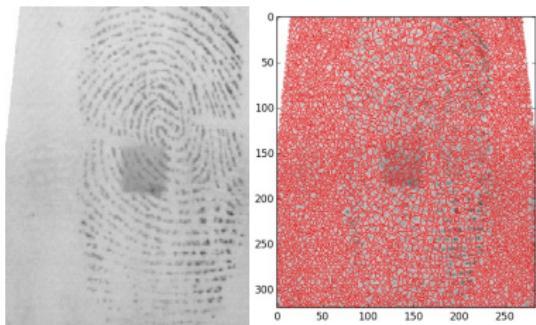
(d) Janela 45x45



(e) Retificado

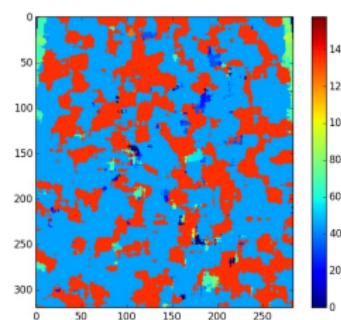


(f) Pixels retificados

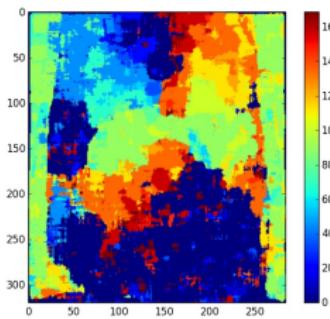


(a) Original

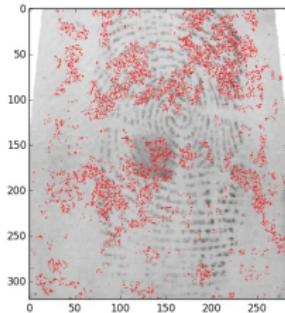
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



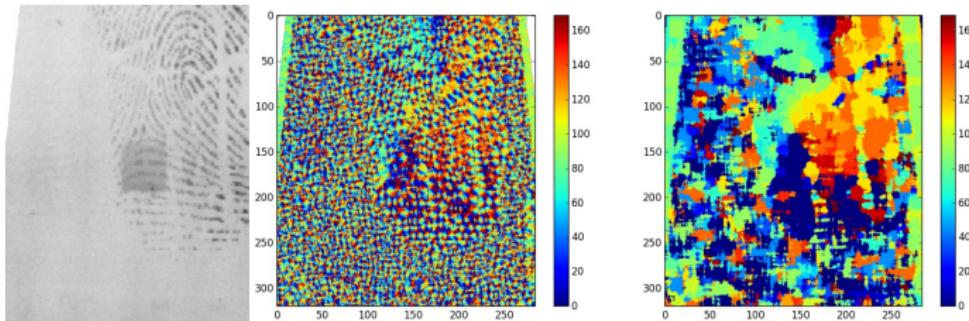
(e) Marcadores



(a) Original



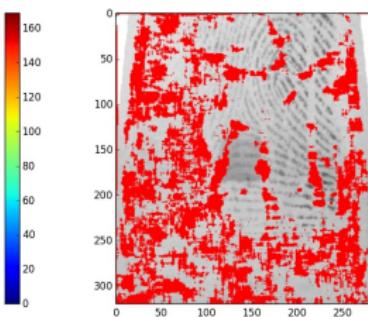
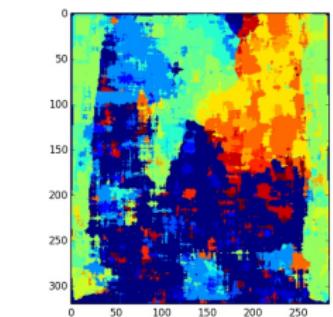
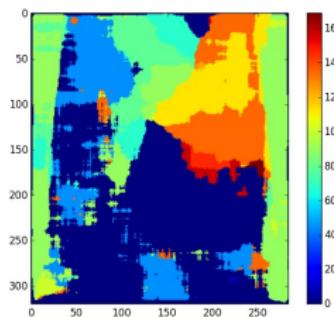
(b) Resultado final



(a) Original

(b) Info. Direcional

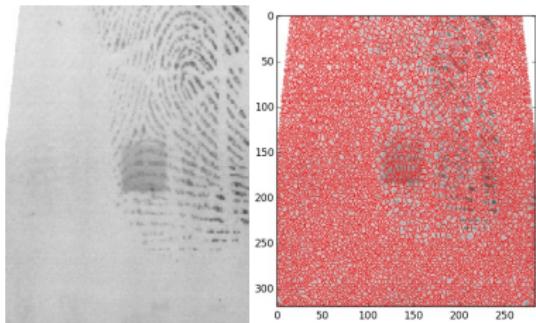
(c) Janela 15x15



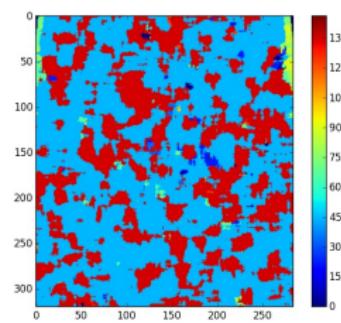
(d) Janela 45x45

(e) Retificado

(f) Pixels retificados

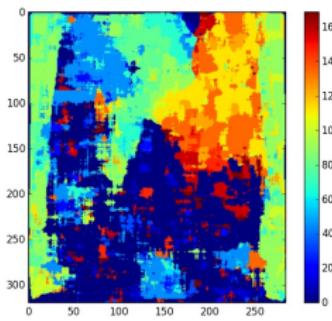


(a) Original

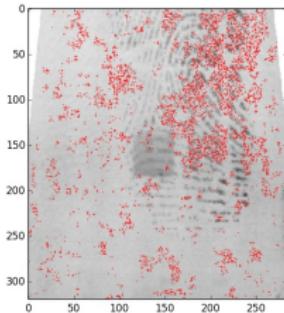


(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



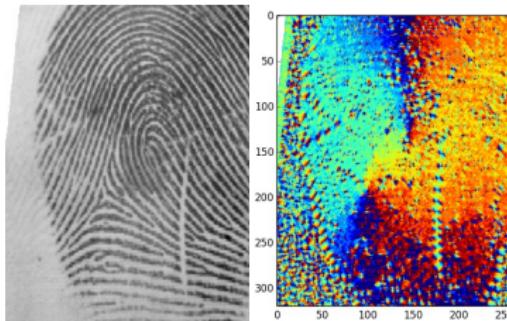
(e) Marcadores



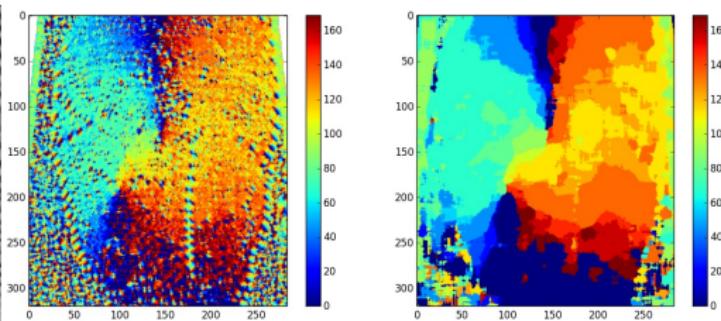
(a) Original



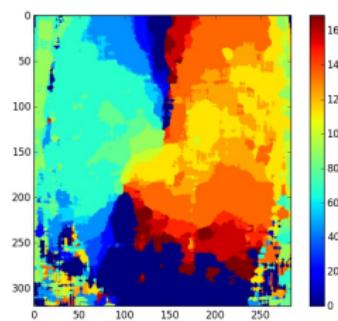
(b) Resultado final



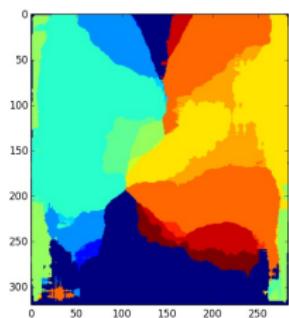
(a) Original



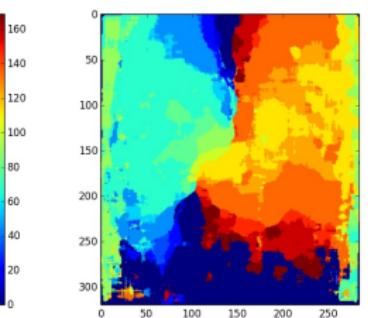
(b) Info. Direcional



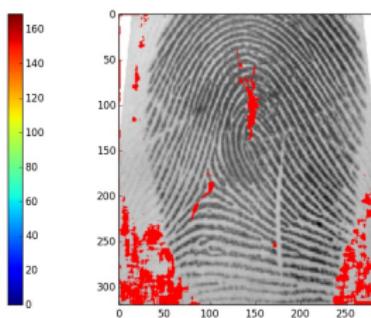
(c) Janela 15x15



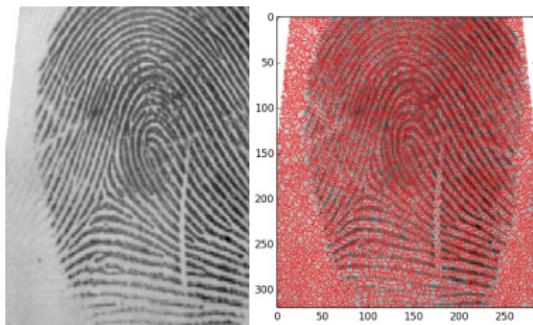
(d) Janela 45x45



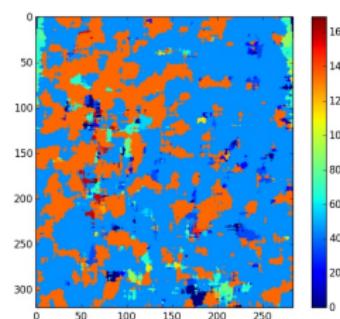
(e) Retificado



(f) Pixels retificados

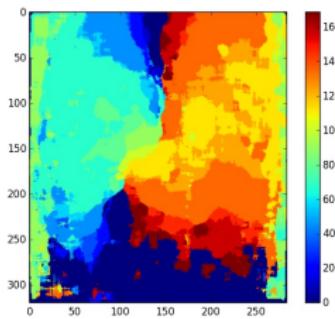


(a) Original

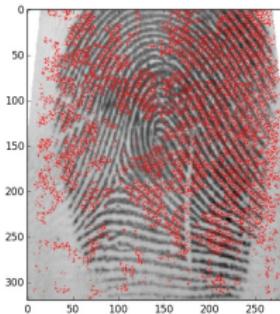


(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



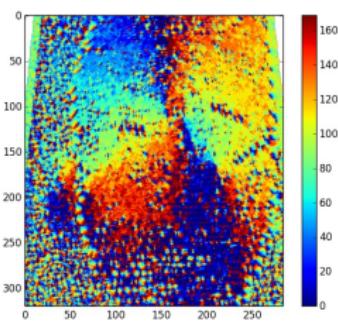
(a) Original



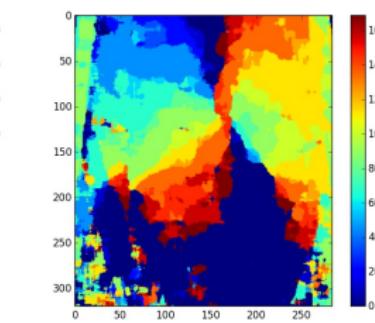
(b) Resultado final



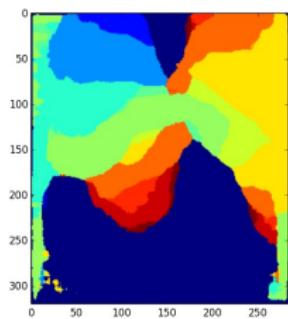
(a) Original



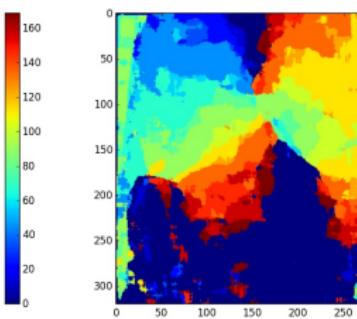
(b) Info. Direcional



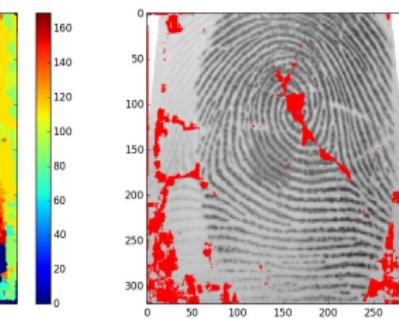
(c) Janela 15x15



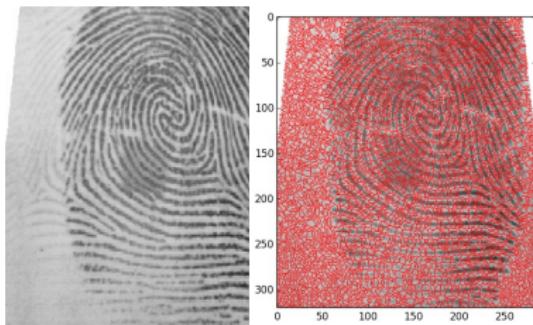
(d) Janela 45x45



(e) Retificado

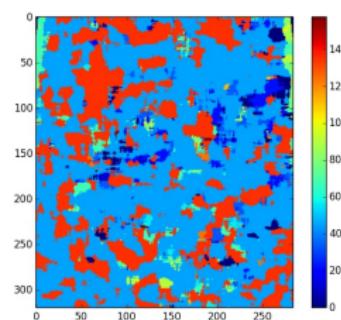


(f) Pixels retificados

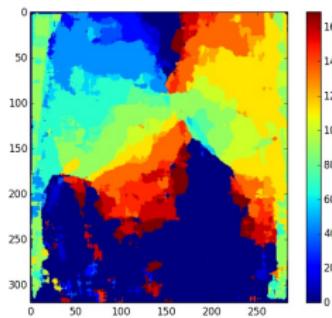


(a) Original

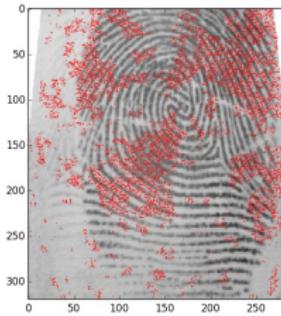
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



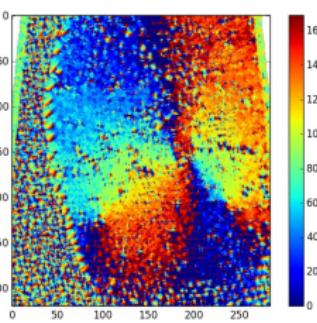
(a) Original



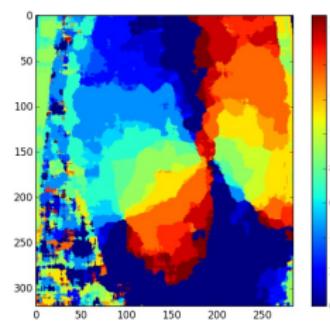
(b) Resultado final



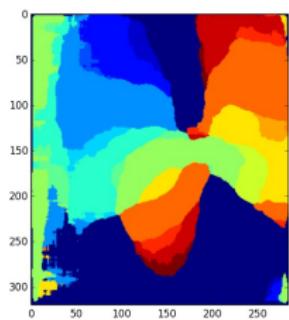
(a) Original



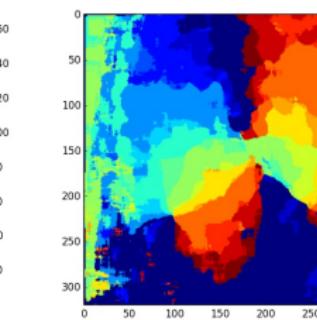
(b) Info. Direcional



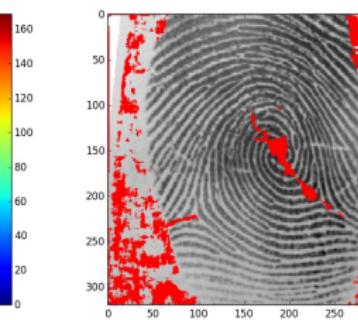
(c) Janela 15x15



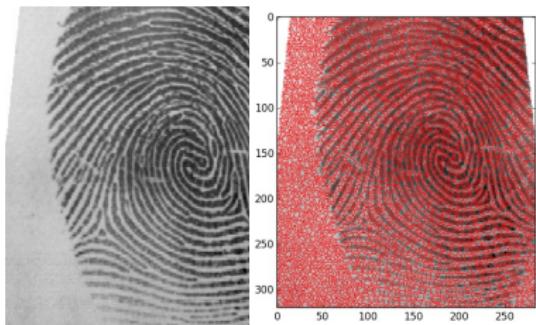
(d) Janela 45x45



(e) Retificado

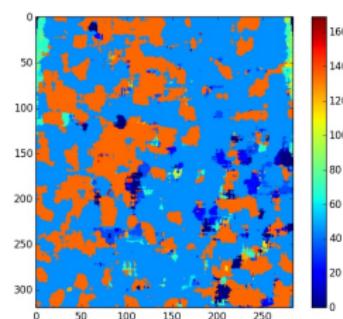


(f) Pixels retificados

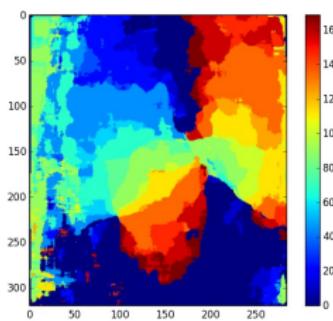


(a) Original

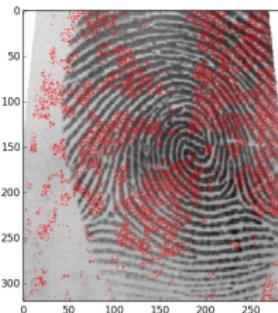
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



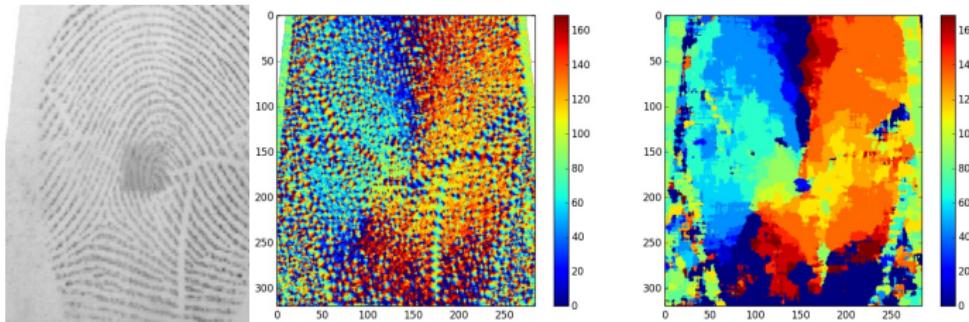
(e) Marcadores



(a) Original



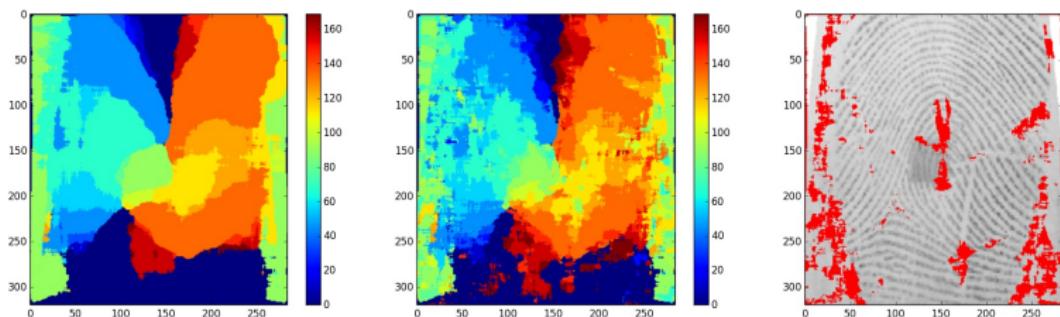
(b) Resultado final



(a) Original

(b) Info. Direcional

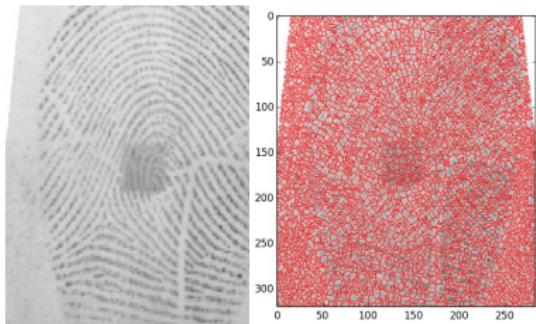
(c) Janela 15x15



(d) Janela 45x45

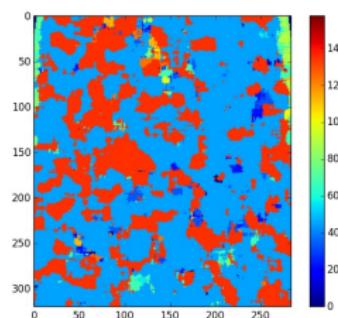
(e) Retificado

(f) Pixels retificados

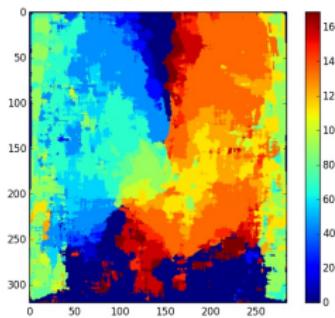


(a) Original

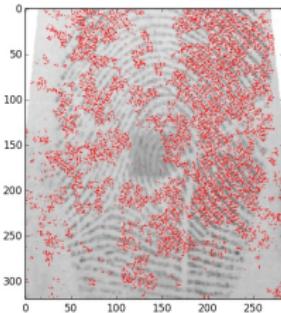
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



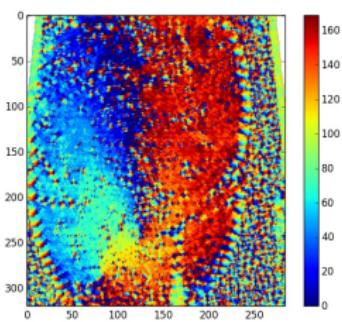
(a) Original



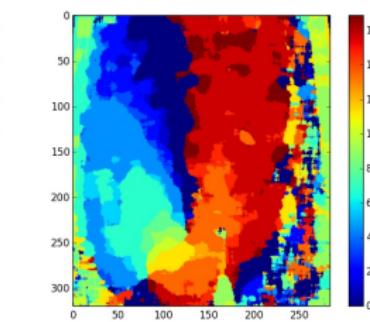
(b) Resultado final



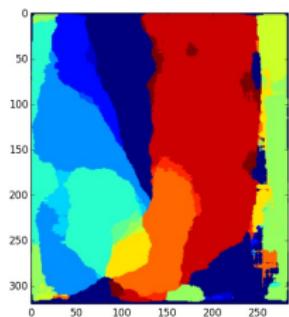
(a) Original



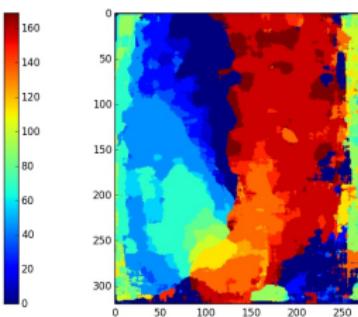
(b) Info. Direcional



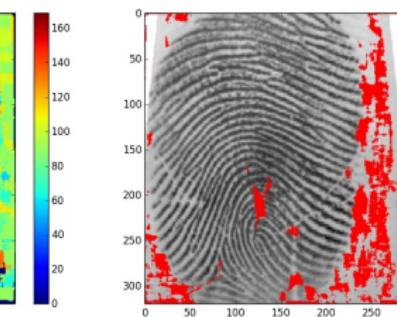
(c) Janela 15x15



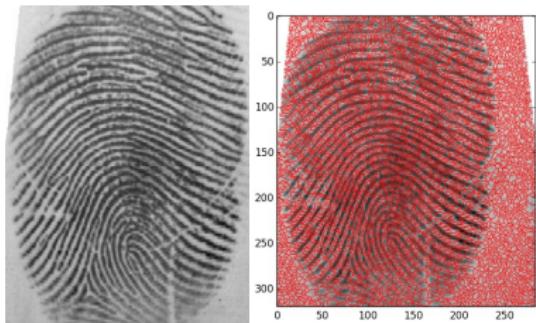
(d) Janela 45x45



(e) Retificado

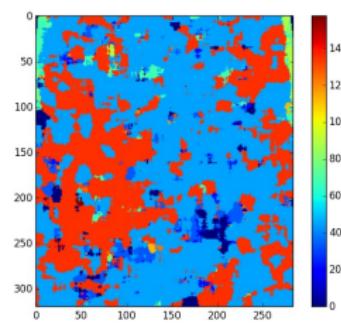


(f) Pixels retificados

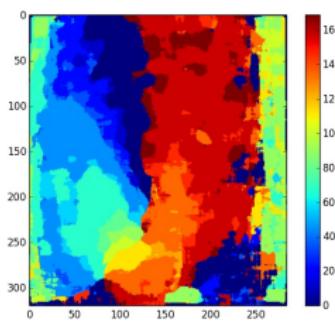


(a) Original

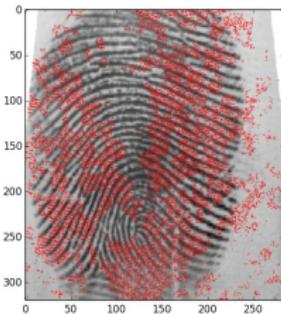
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



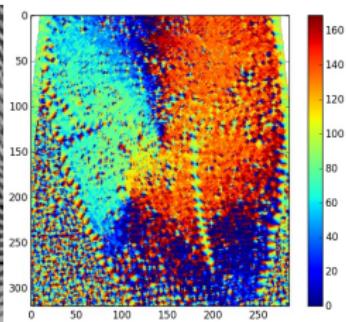
(a) Original



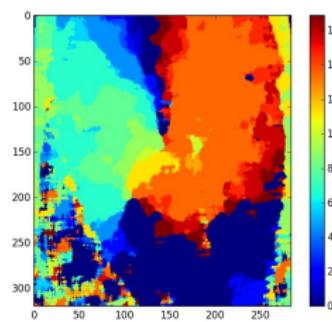
(b) Resultado final



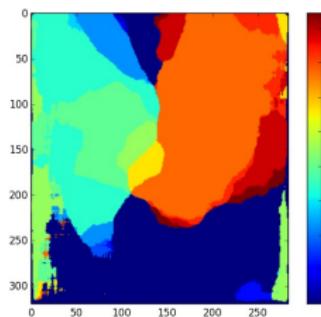
(a) Original



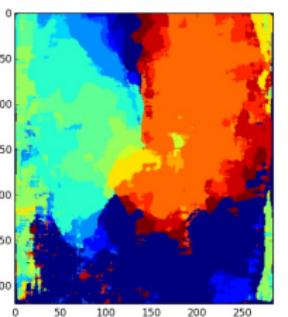
(b) Info. Direcional



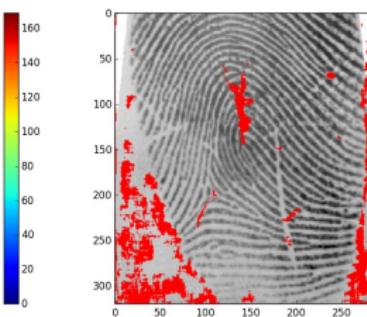
(c) Janela 15x15



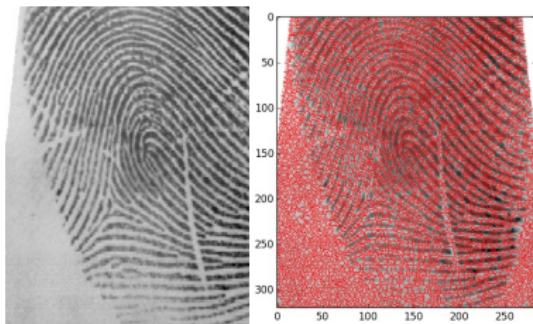
(d) Janela 45x45



(e) Retificado

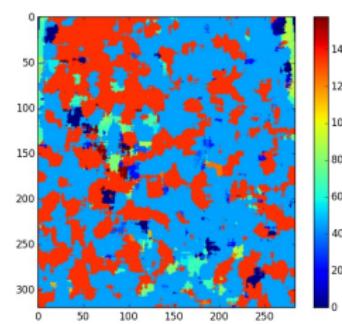


(f) Pixels retificados

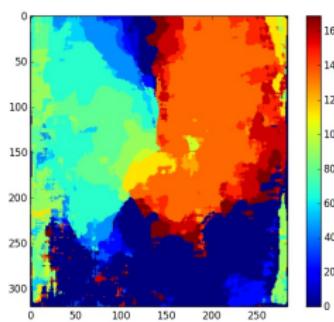


(a) Original

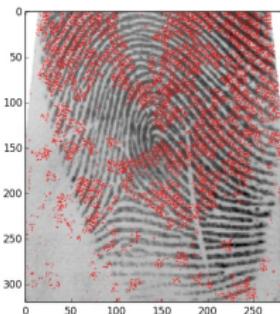
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



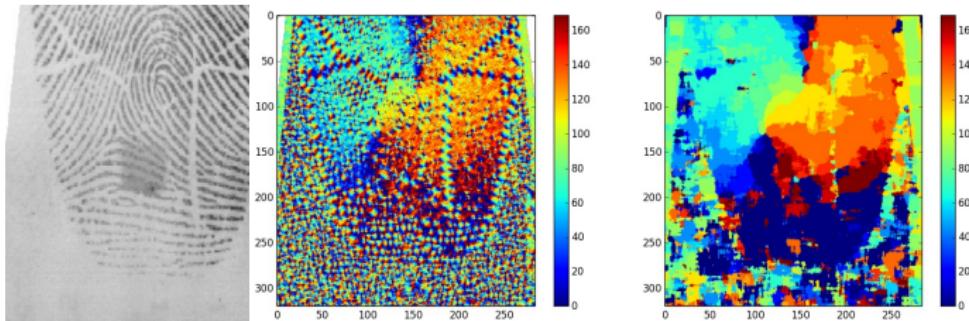
(e) Marcadores



(a) Original



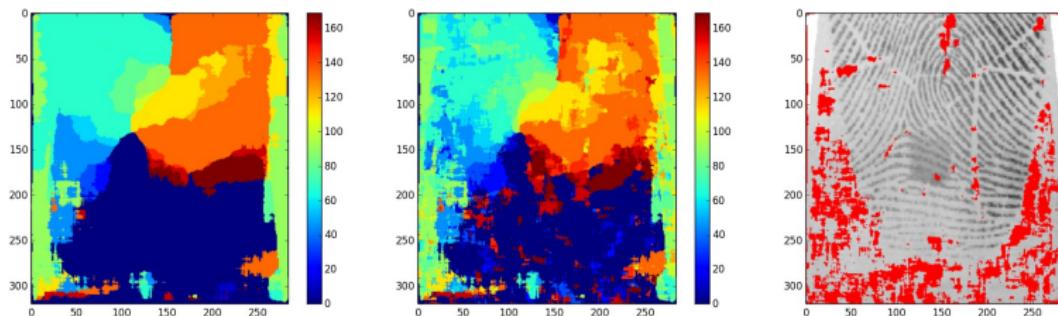
(b) Resultado final



(a) Original

(b) Info. Direcional

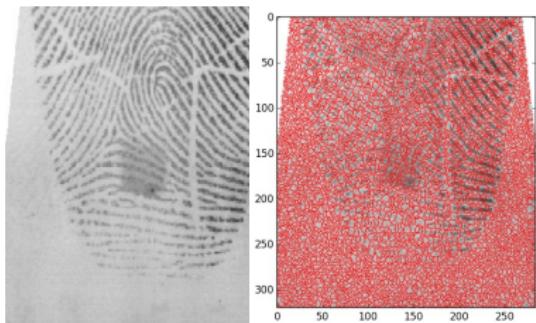
(c) Janela 15x15



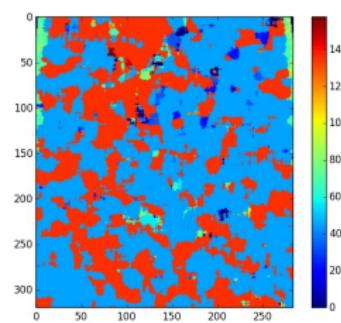
(d) Janela 45x45

(e) Retificado

(f) Pixels retificados

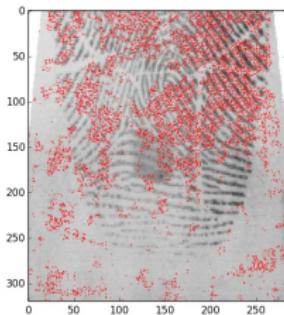
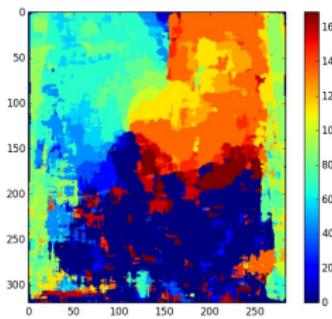


(a) Original



(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

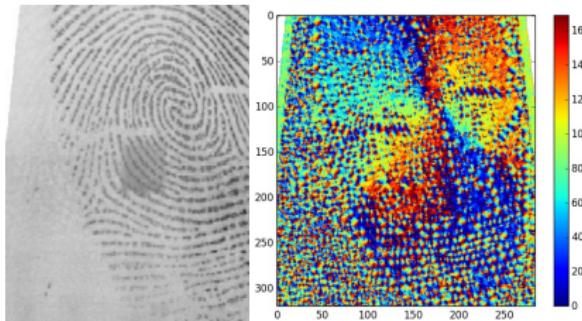
(e) Marcadores



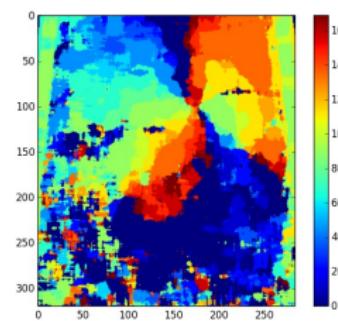
(a) Original



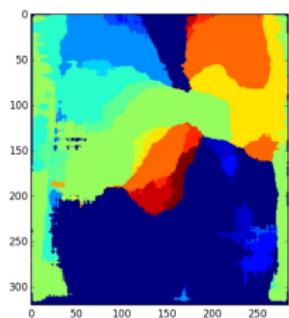
(b) Resultado final



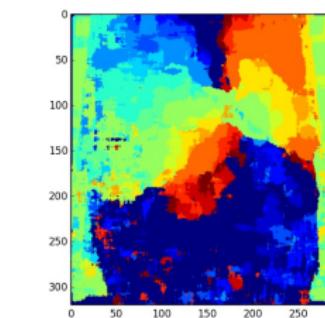
(a) Original



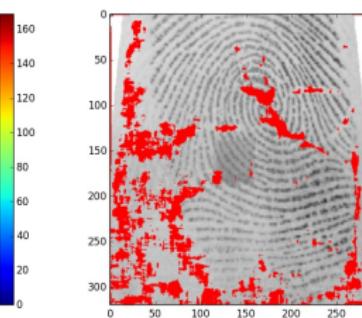
(b) Info. Direcional



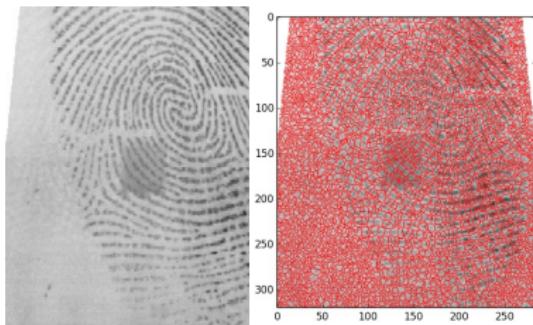
(d) Janela 15x15



(e) Retificado

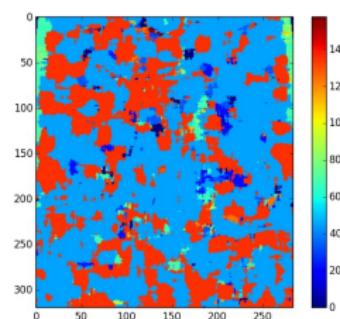


(f) Pixels retificados

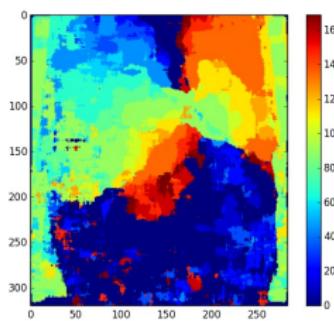


(a) Original

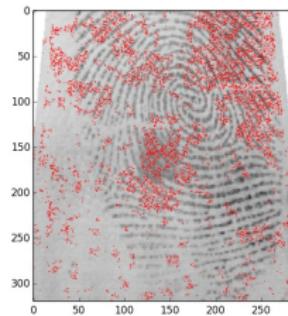
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



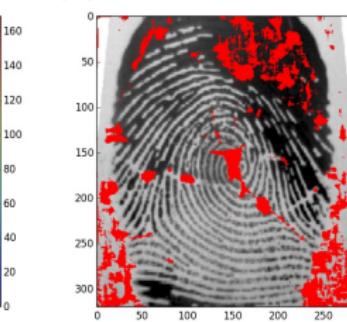
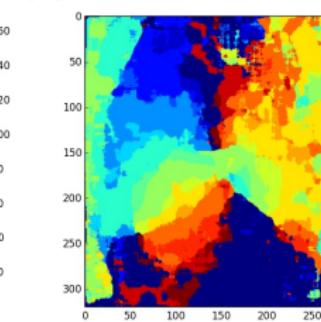
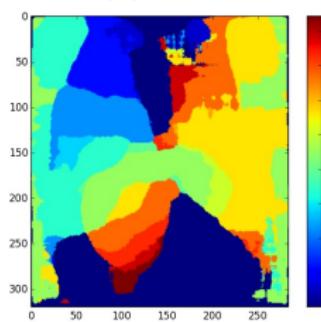
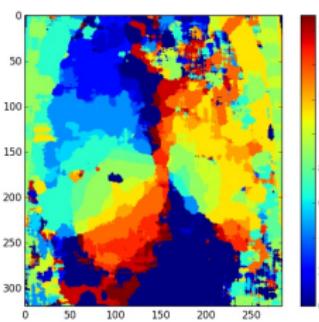
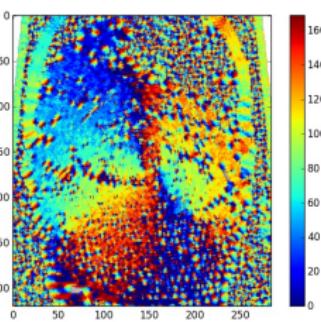
(e) Marcadores



(a) Original

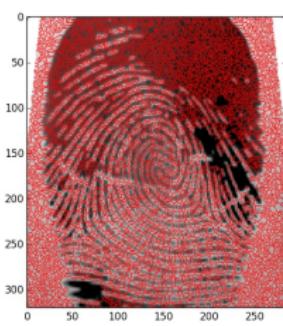


(b) Resultado final

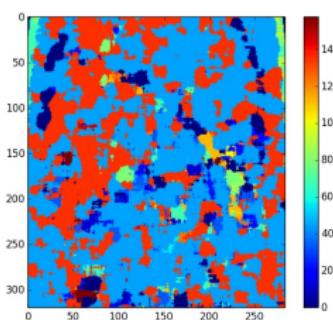




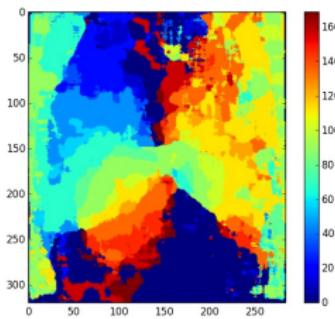
(a) Original



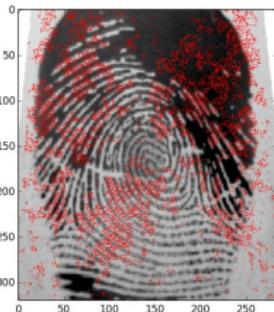
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



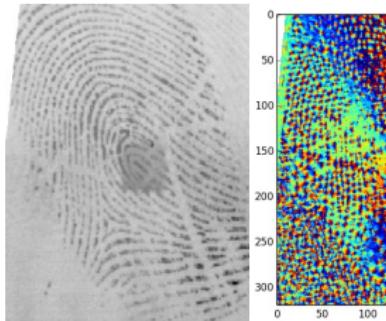
(e) Marcadores



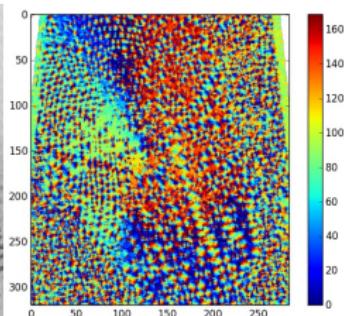
(a) Original



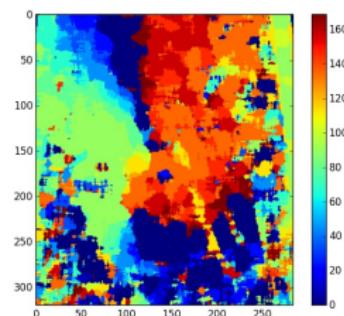
(b) Resultado final



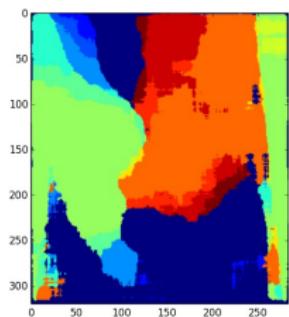
(a) Original



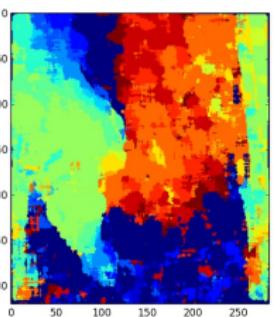
(b) Info. Direcional



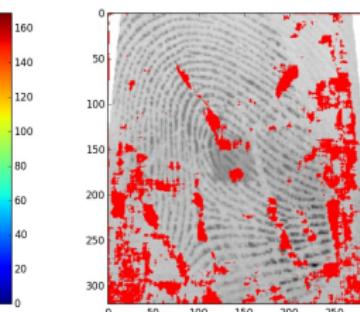
(c) Janela 15x15



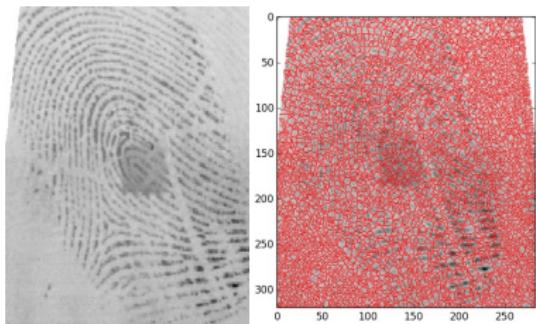
(d) Janela 45x45



(e) Retificado

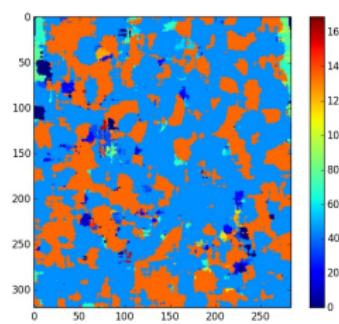


(f) Pixels retificados

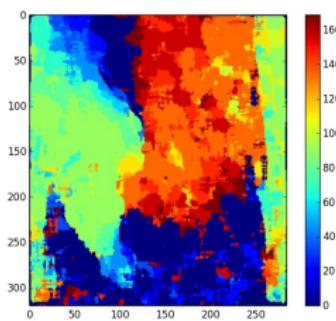


(a) Original

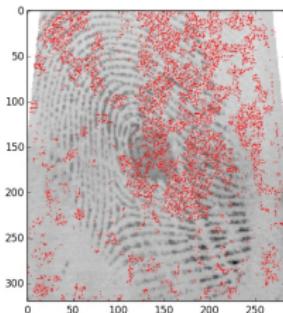
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



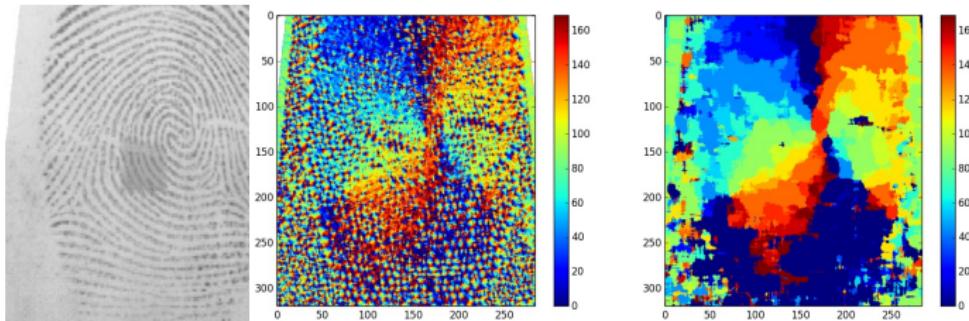
(e) Marcadores



(a) Original



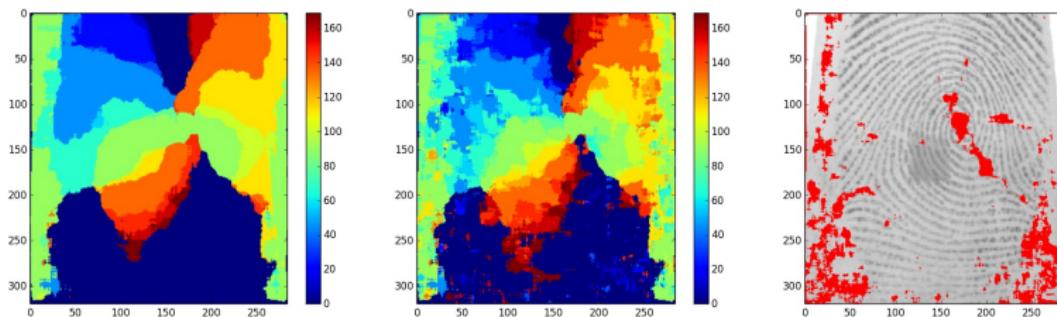
(b) Resultado final



(a) Original

(b) Info. Direcional

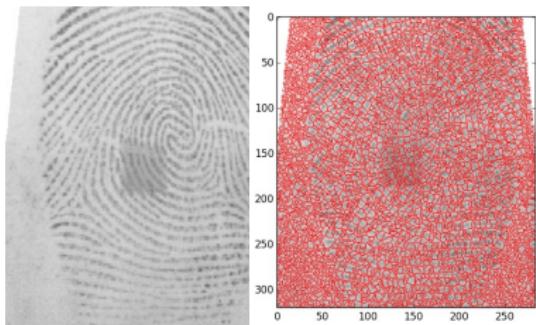
(c) Janela 15x15



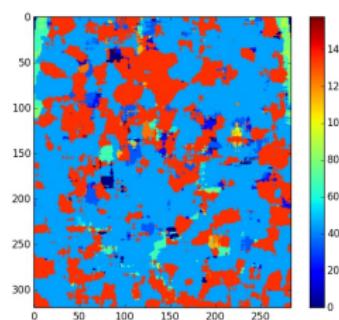
(d) Janela 45x45

(e) Retificado

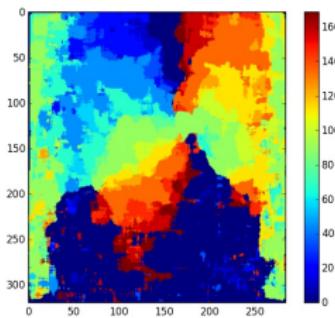
(f) Pixels retificados



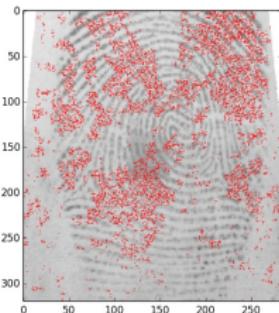
(a) Original



(b) Watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



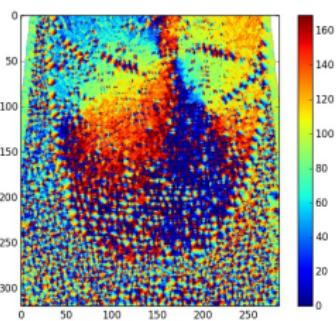
(a) Original



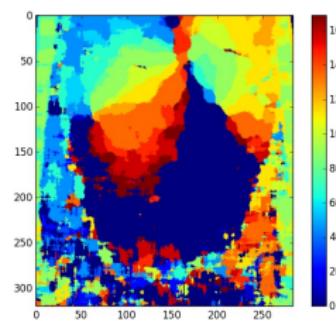
(b) Resultado final



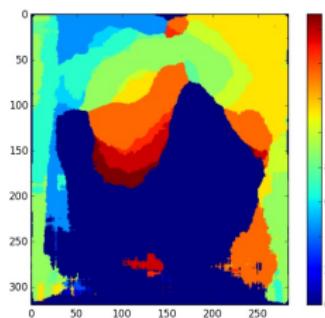
(a) Original



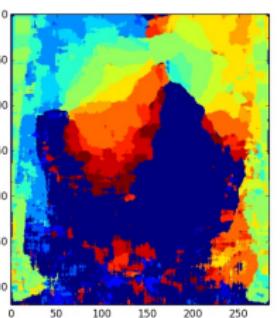
(b) Info. Direcional



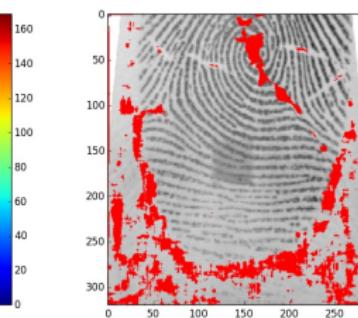
(c) Janela 15x15



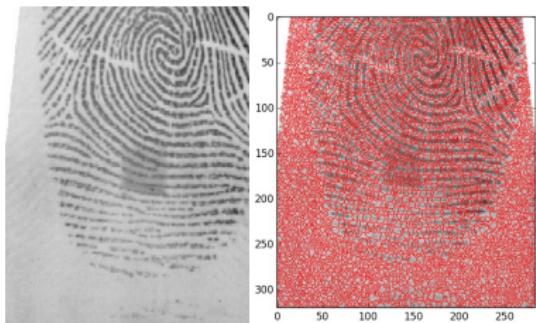
(d) Janela 45x45



(e) Retificado

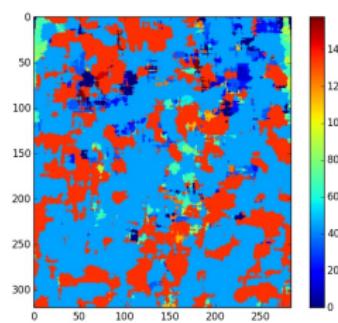


(f) Pixels retificados

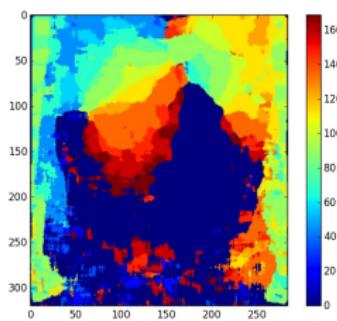


(a) Original

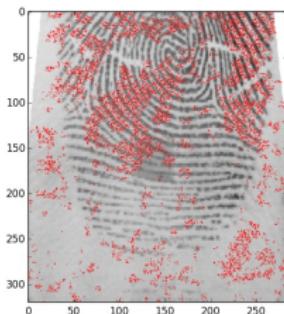
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



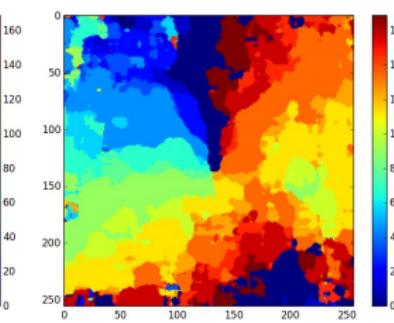
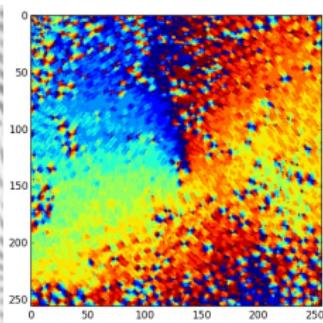
(e) Marcadores



(a) Original



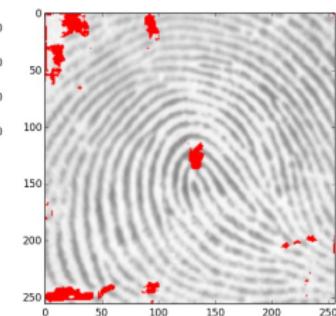
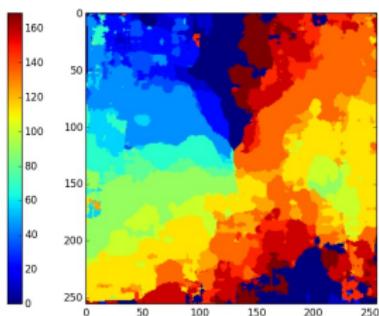
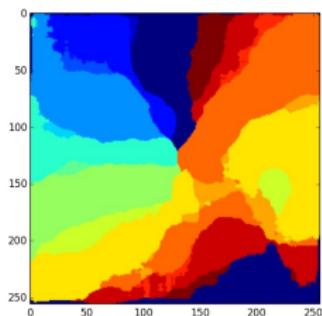
(b) Resultado final



(a) Original

(b) Info. Direcional

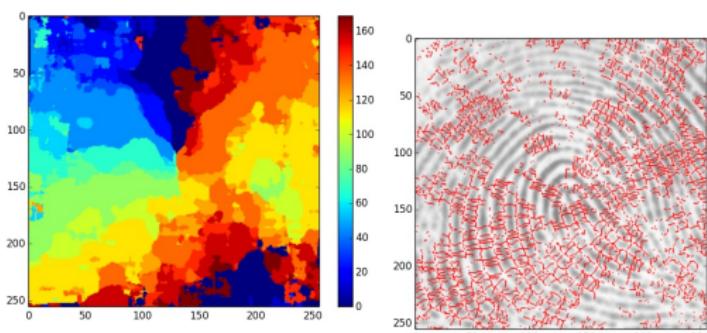
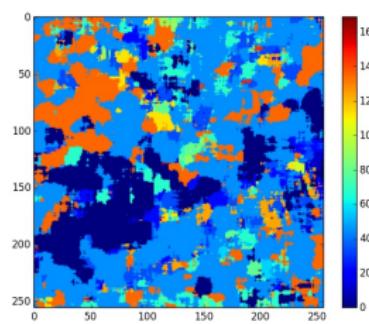
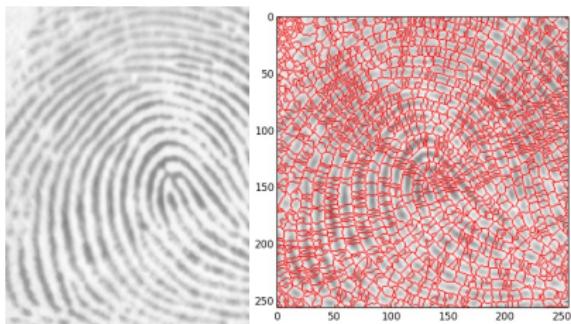
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

(f) Pixels retificados



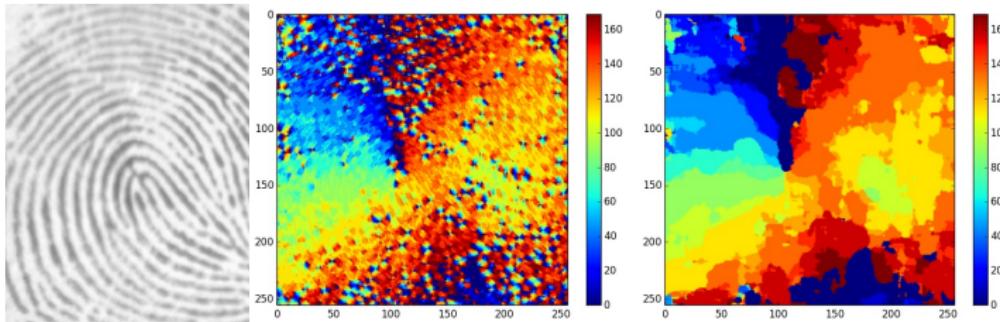
(e) Marcadores



(a) Original



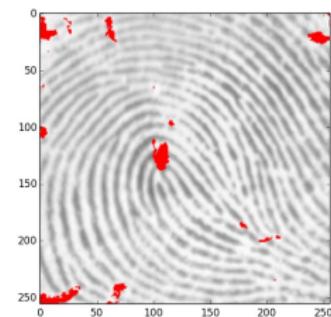
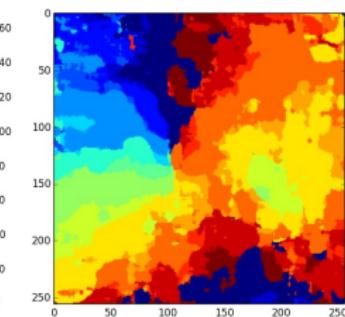
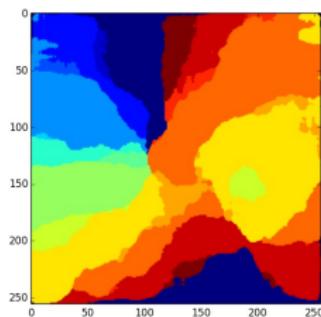
(b) Resultado final



(a) Original

(b) Info. Direcional

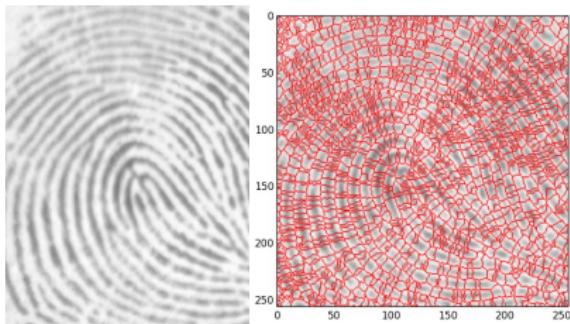
(c) Janela 15x15



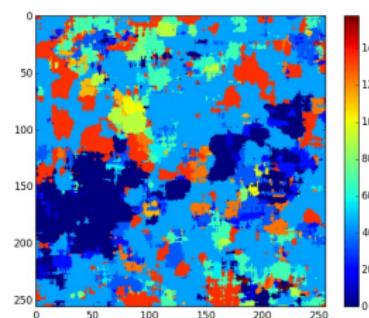
(d) Janela 45x45

(e) Retificado

(f) Pixels retificados

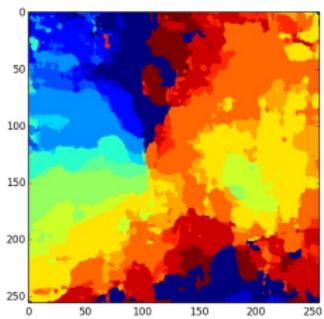


(a) Original

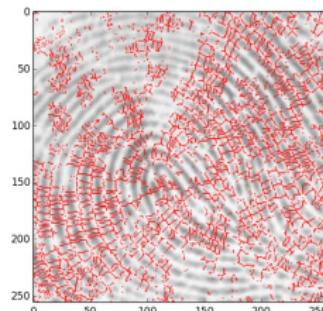


(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



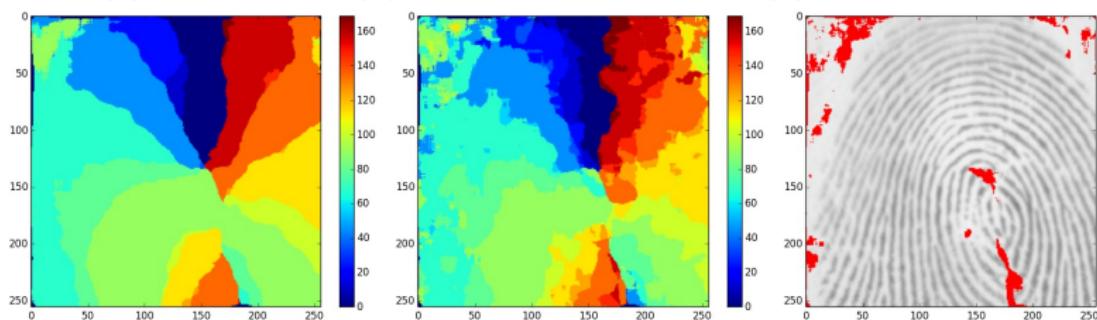
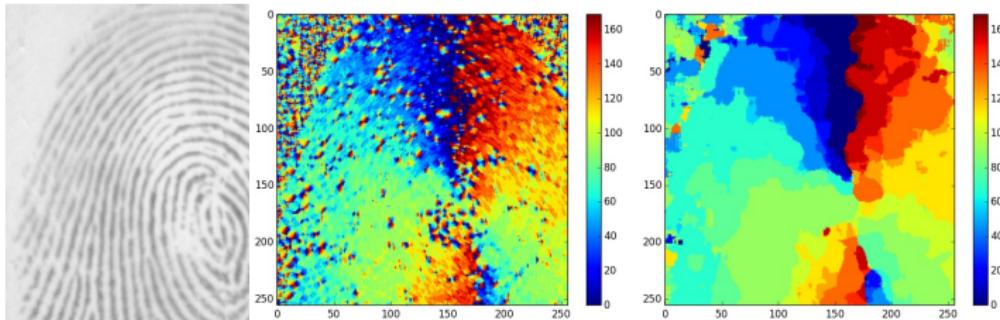
(e) Marcadores

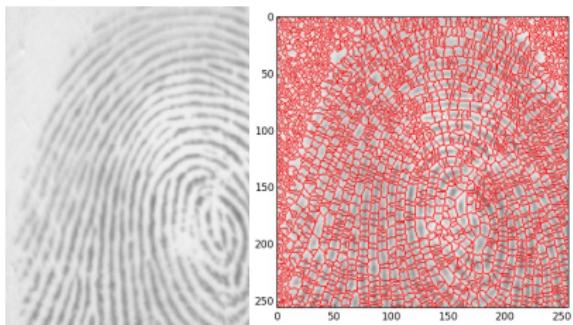


(a) Original



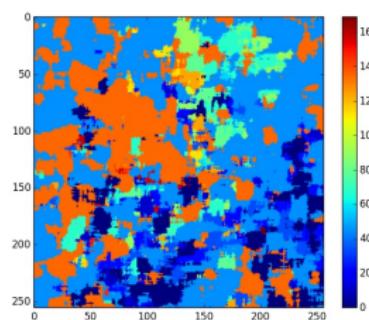
(b) Resultado final



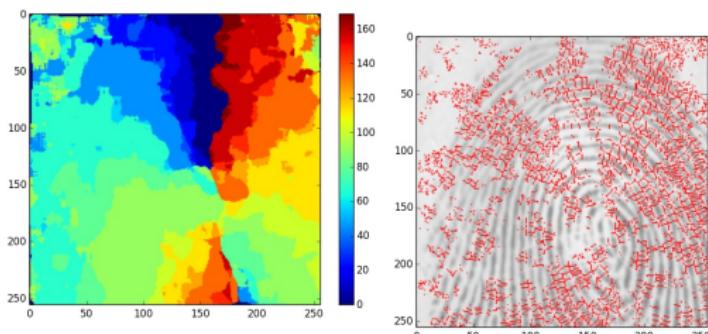


(a) Original

(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

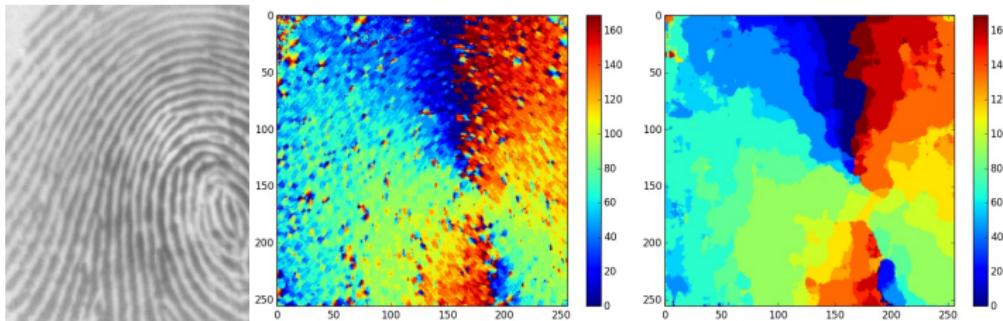
(e) Marcadores



(a) Original



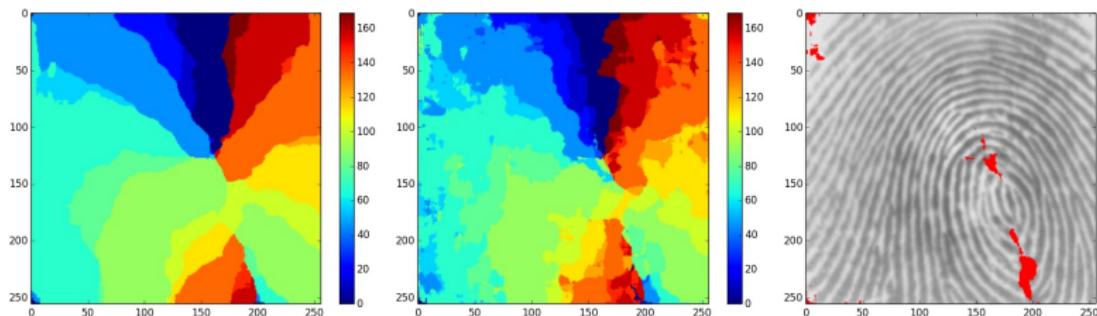
(b) Resultado final



(a) Original

(b) Info. Direcional

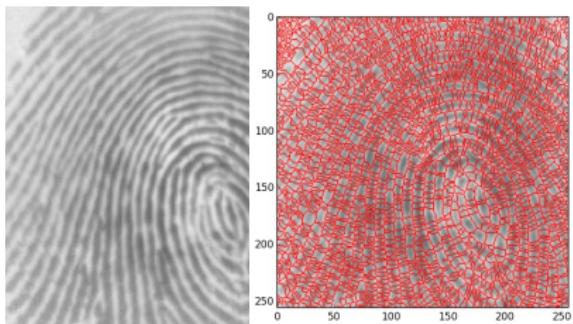
(c) Janela 15x15



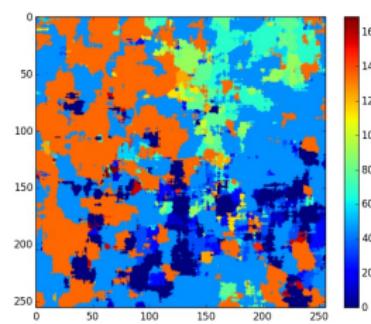
(d) Janela 45x45

(e) Retificado

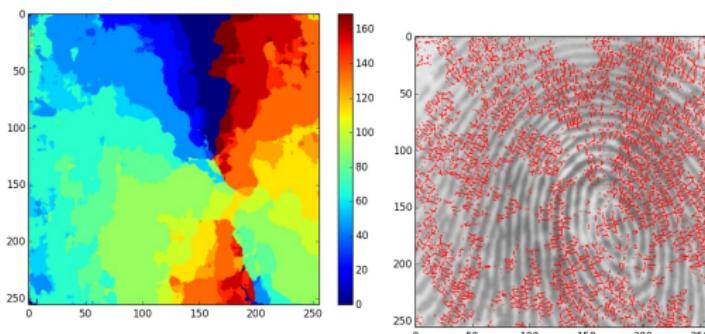
(f) Pixels retificados



(a) Original



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

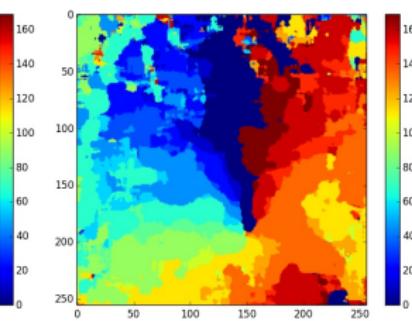
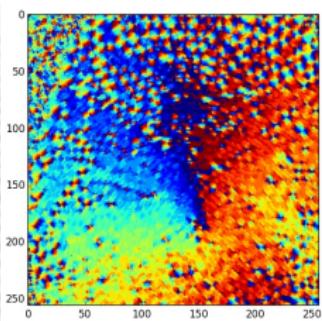
(e) Marcadores



(a) Original



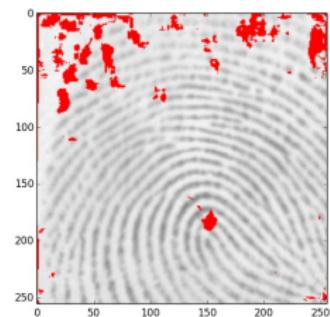
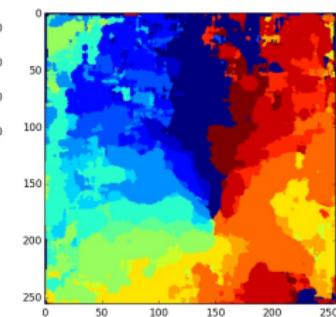
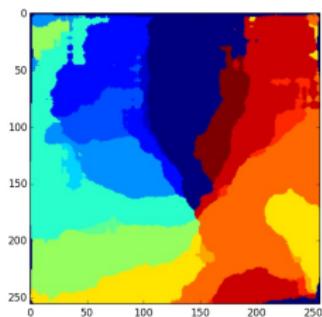
(b) Resultado final



(a) Original

(b) Info. Direcional

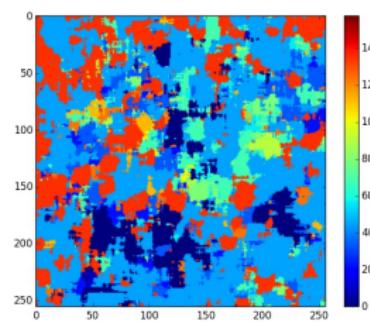
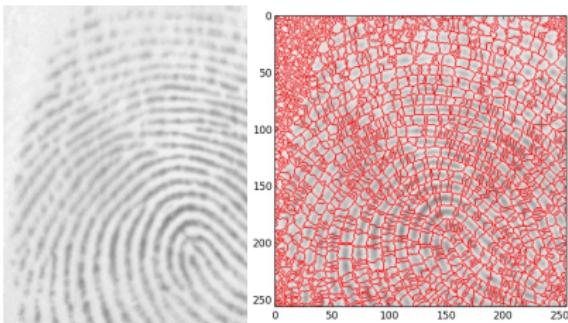
(c) Janela 15x15



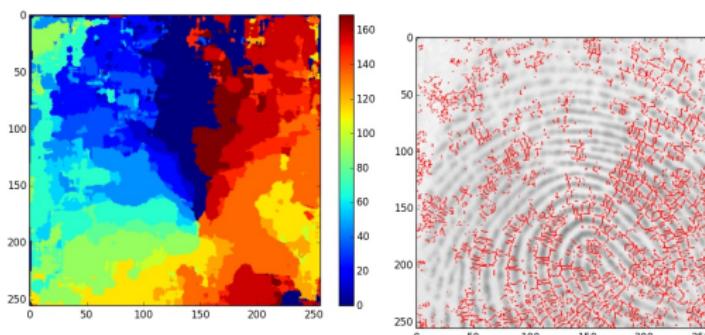
(d) Janela 45x45

(e) Retificado

(f) Pixels retificados



(c) Direção watershed



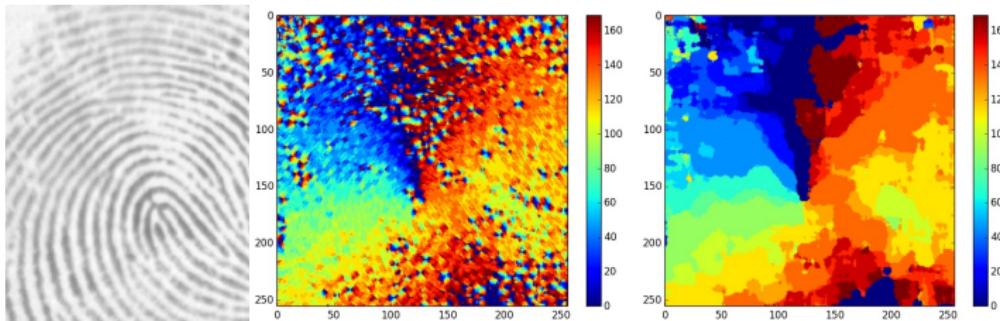
(e) Marcadores



(a) Original



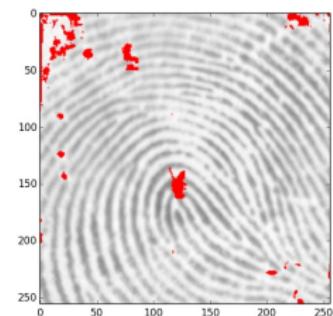
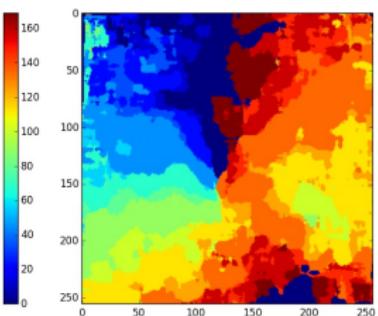
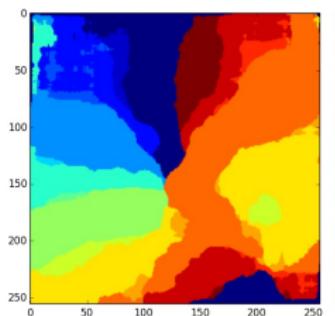
(b) Resultado final



(a) Original

(b) Info. Direcional

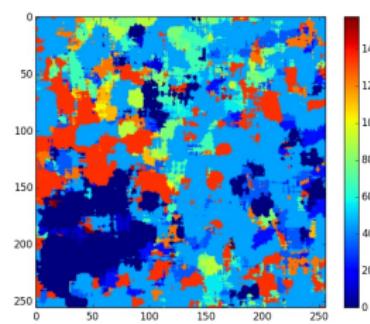
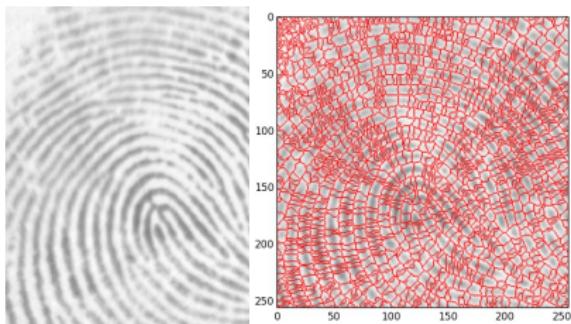
(c) Janela 15x15



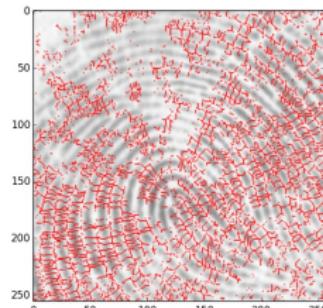
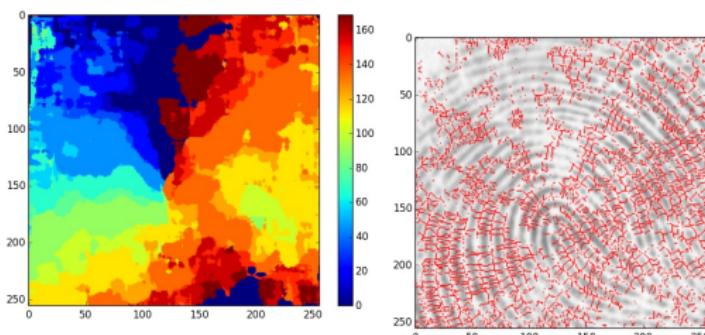
(d) Janela 45x45

(e) Retificado

(f) Pixels retificados



(c) Direção watershed

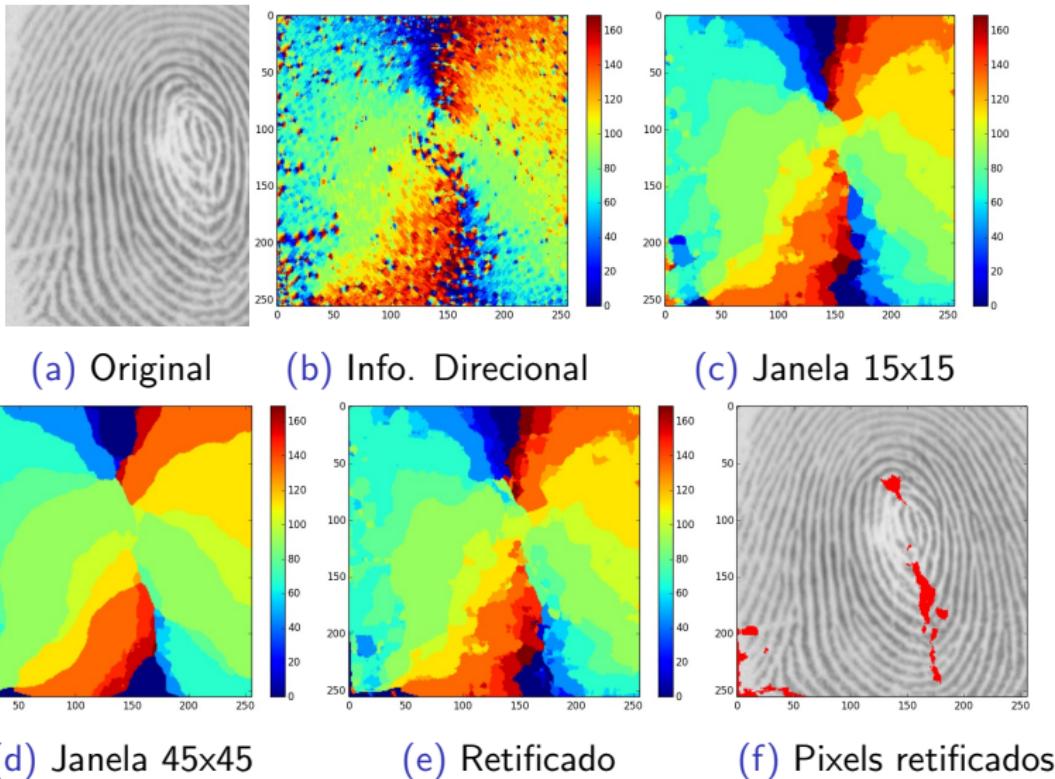


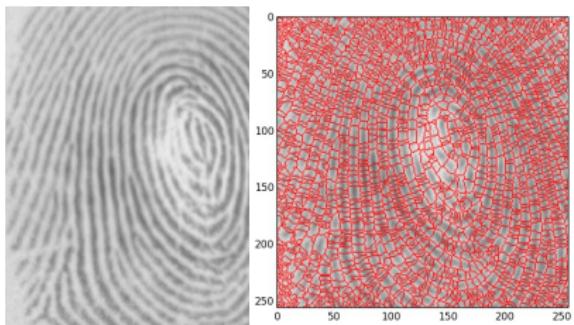


(a) Original



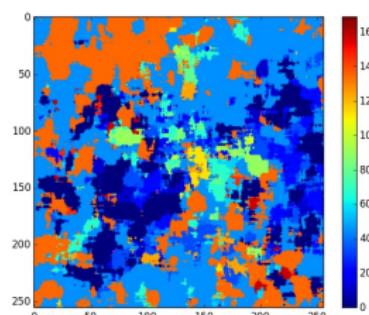
(b) Resultado final



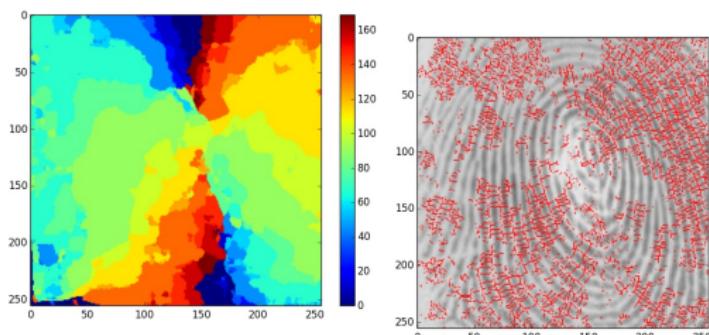


(a) Original

(b) Watershed

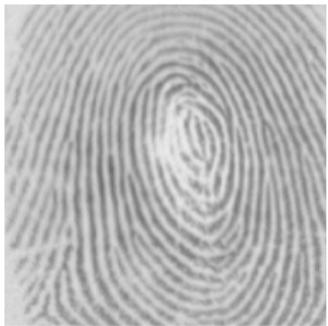


(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

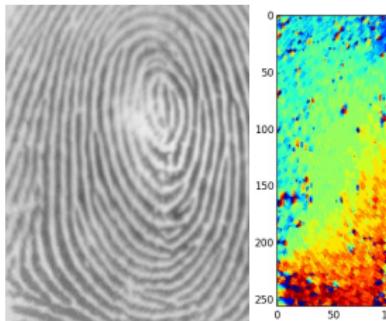
(e) Marcadores



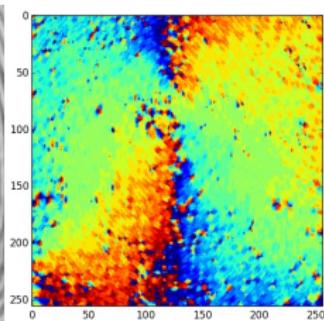
(a) Original



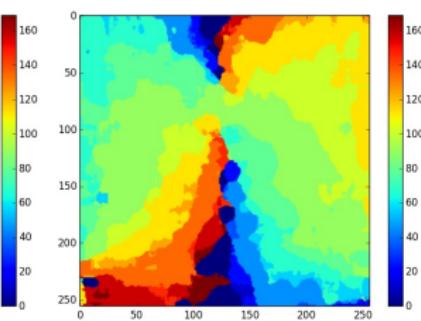
(b) Resultado final



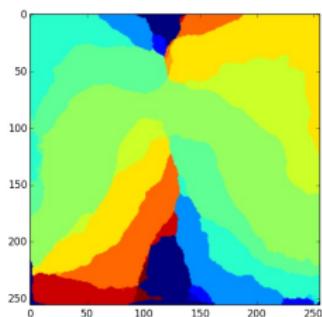
(a) Original



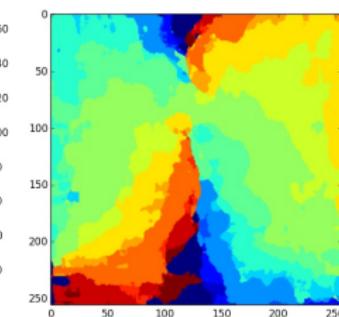
(b) Info. Direcional



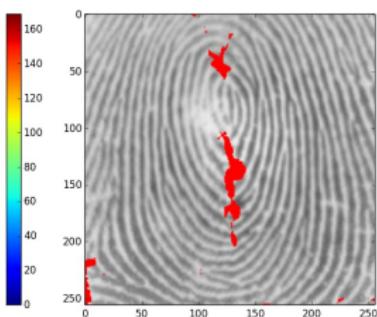
(c) Janela 15x15



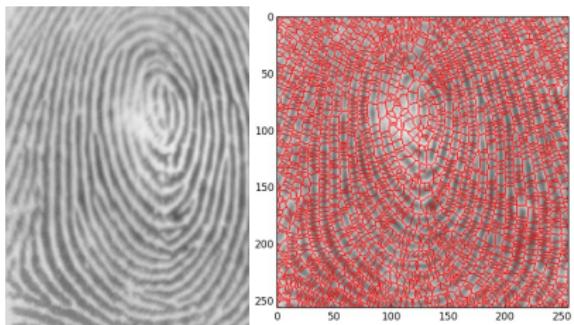
(d) Janela 45x45



(e) Retificado

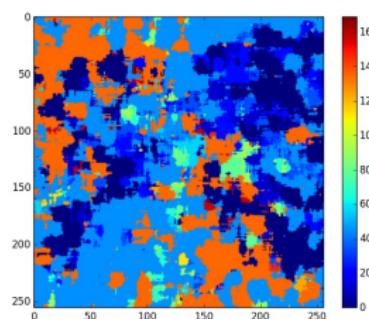


(f) Pixels retificados

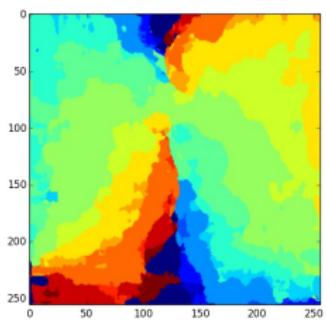


(a) Original

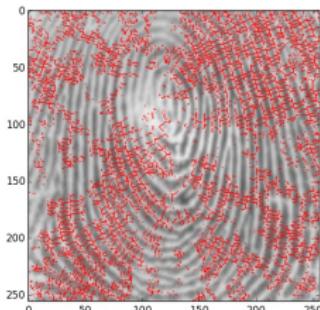
(b) Watershed



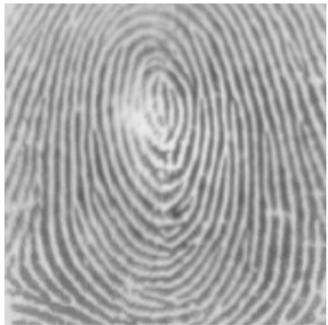
(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



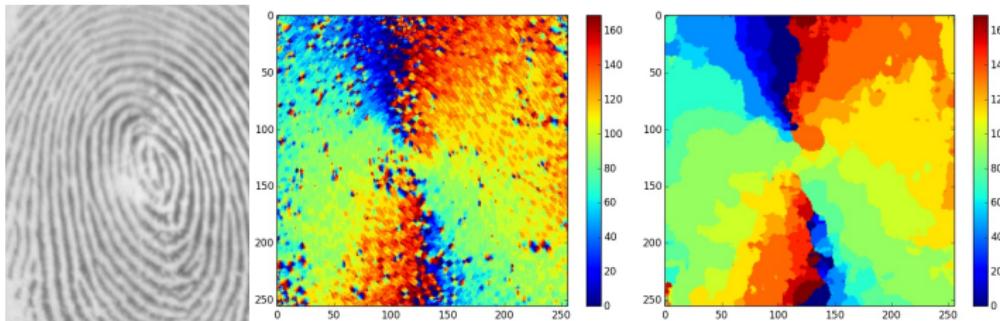
(e) Marcadores



(a) Original



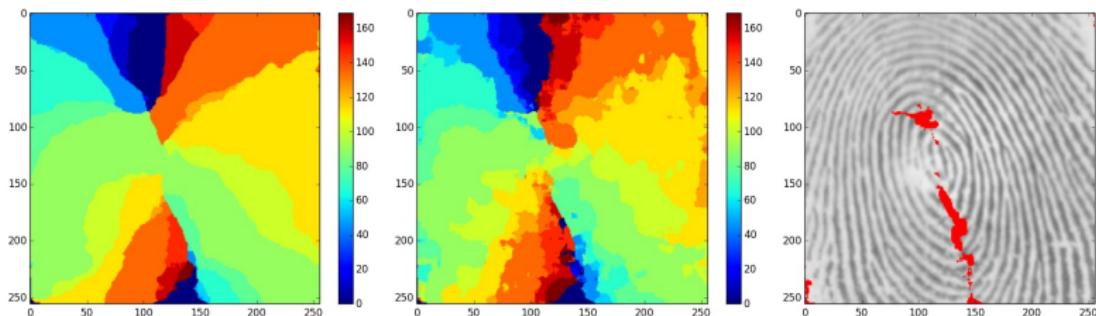
(b) Resultado final



(a) Original

(b) Info. Direcional

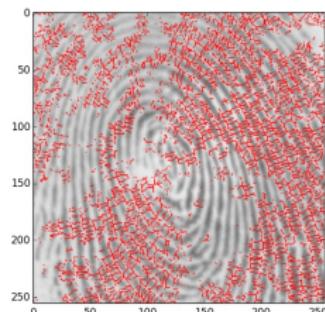
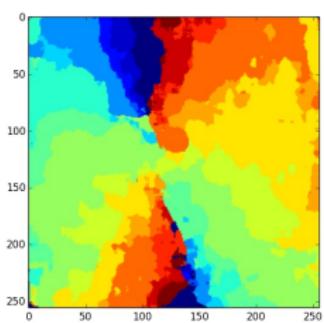
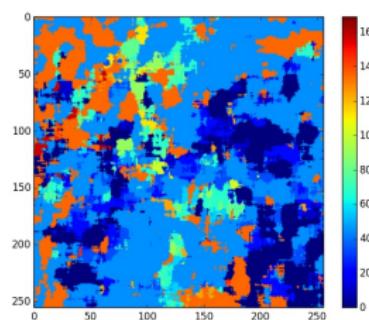
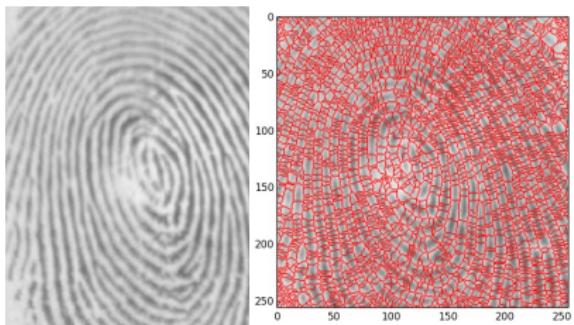
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

(f) Pixels retificados

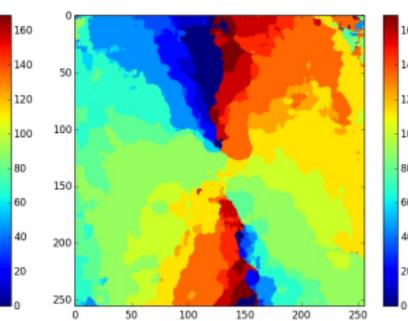
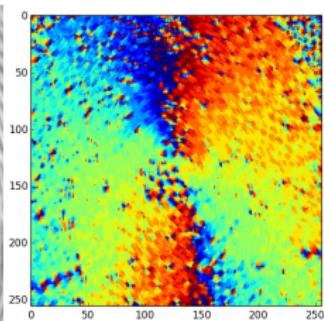
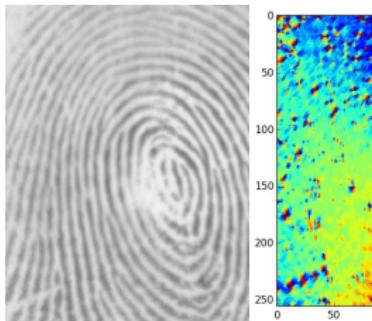




(a) Original



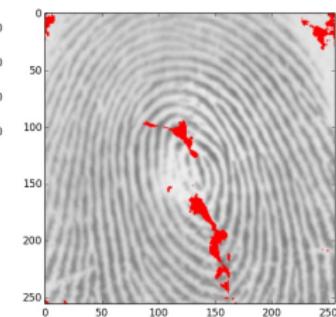
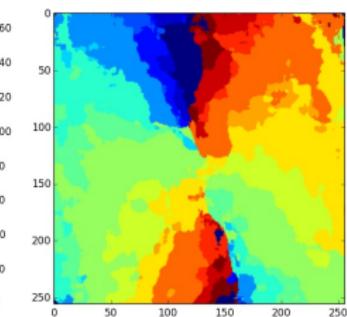
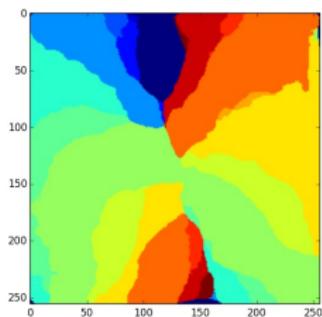
(b) Resultado final



(a) Original

(b) Info. Direcional

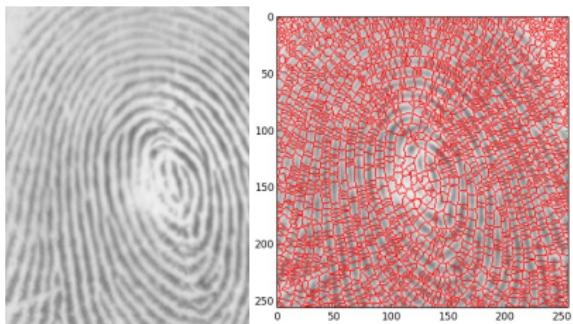
(c) Janela 15x15



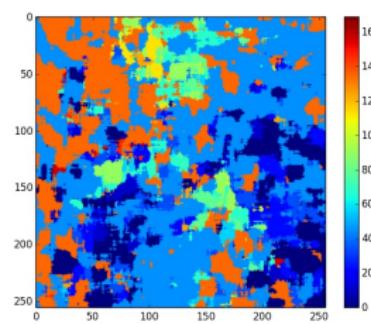
(d) Janela 45x45

(e) Retificado

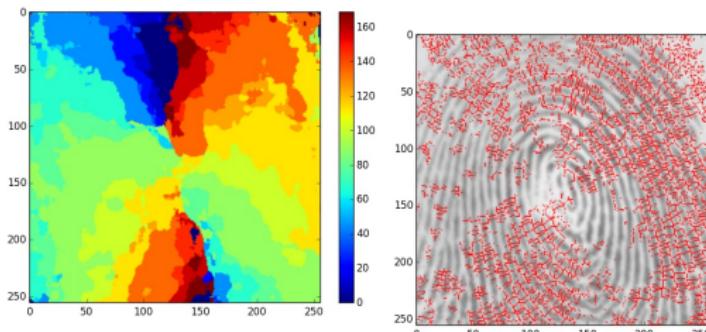
(f) Pixels retificados



(a) Original



(b) Watershed



(d) Info. Direcional
retificada (fig. original)

(c) Direção watershed

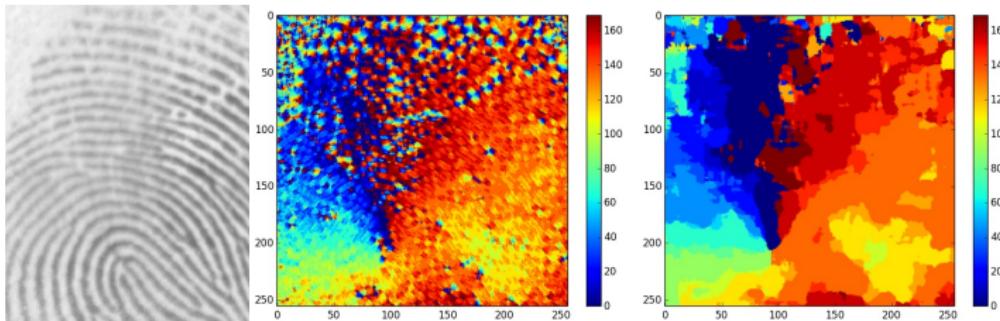
(e) Marcadores



(a) Original



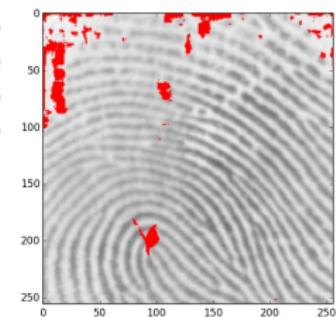
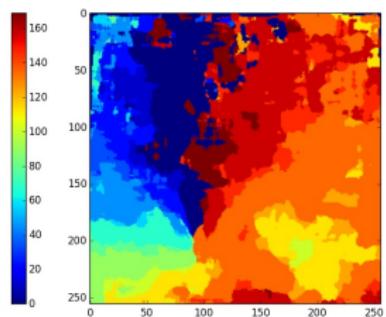
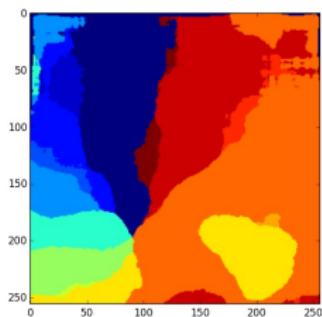
(b) Resultado final



(a) Original

(b) Info. Direcional

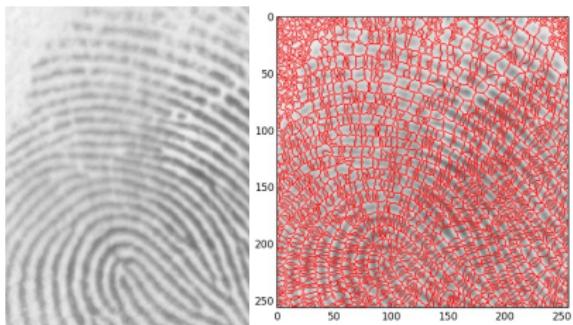
(c) Janela 15x15



(d) Janela 45x45

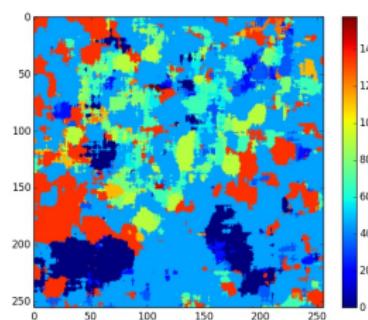
(e) Retificado

(f) Pixels retificados

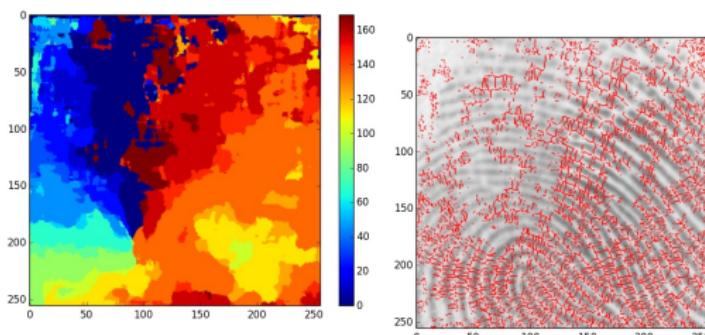


(a) Original

(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

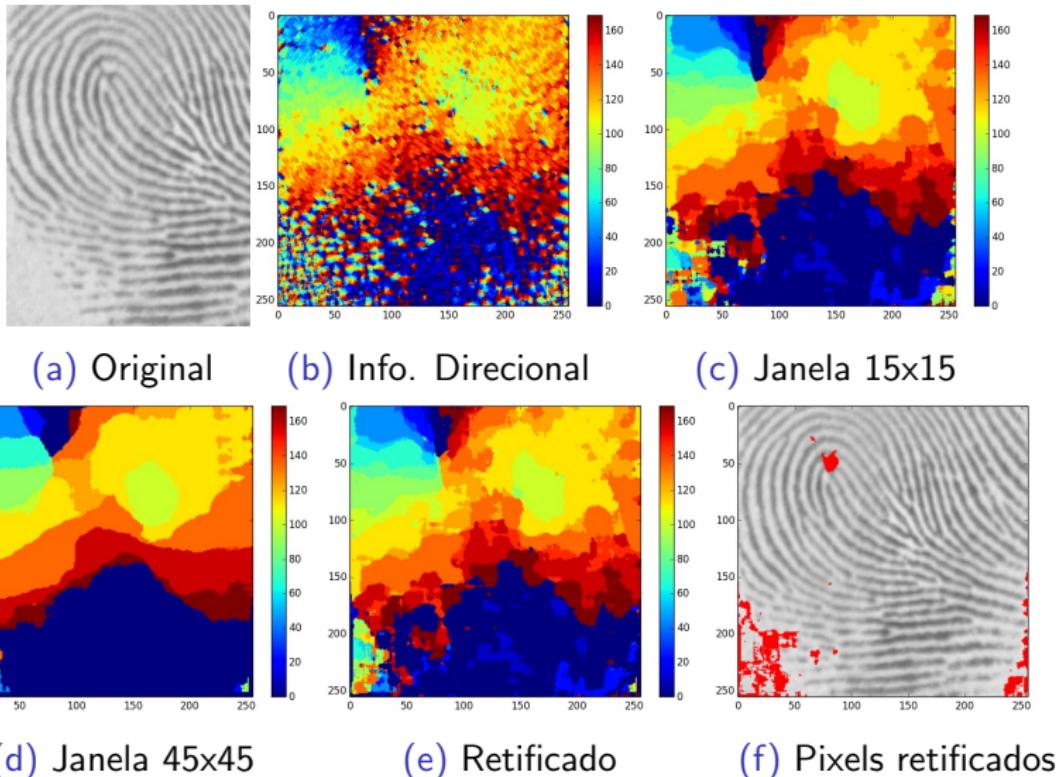
(e) Marcadores

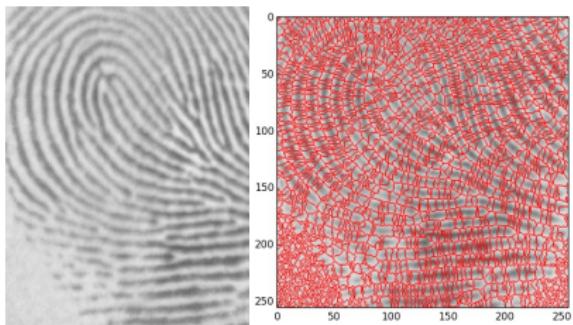


(a) Original



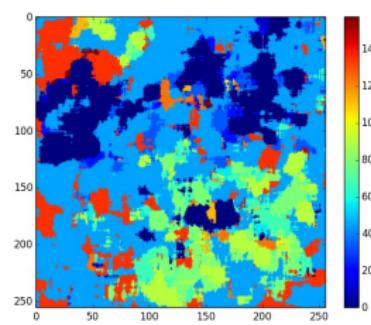
(b) Resultado final



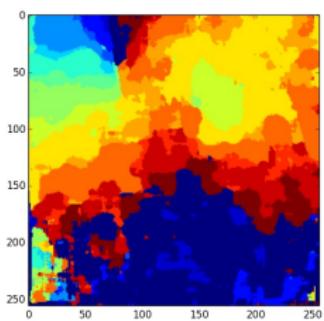


(a) Original

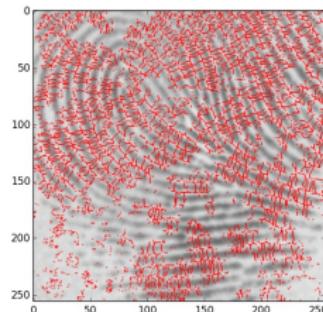
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



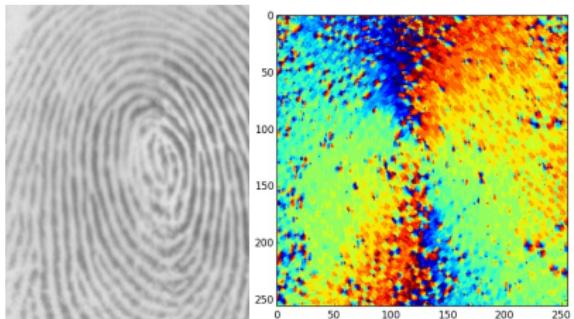
(e) Marcadores



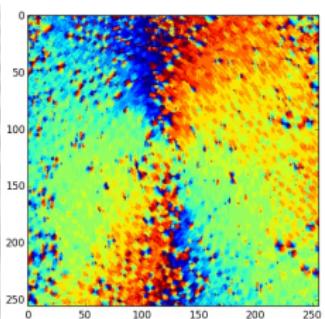
(a) Original



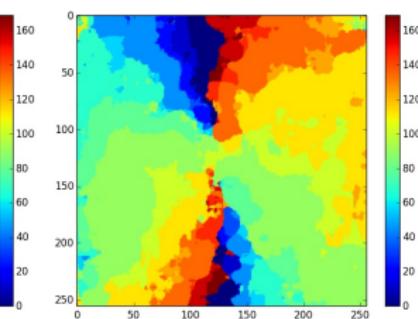
(b) Resultado final



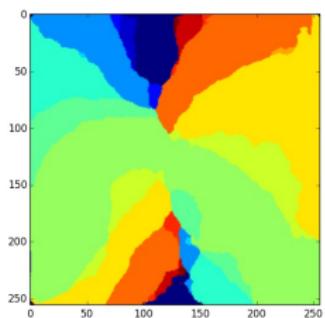
(a) Original



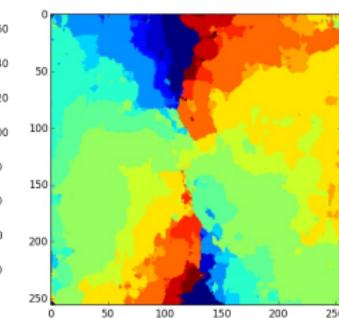
(b) Info. Direcional



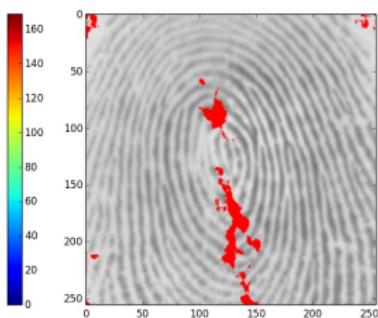
(c) Janela 15x15



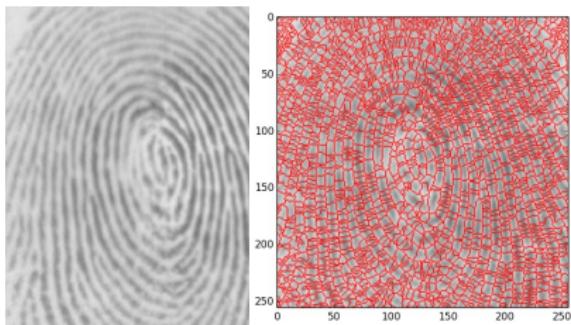
(d) Janela 45x45



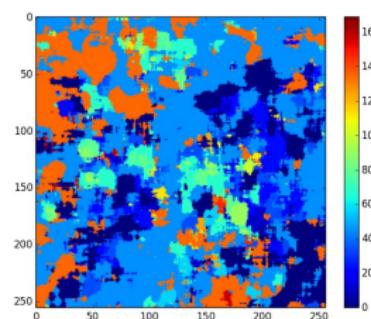
(e) Retificado



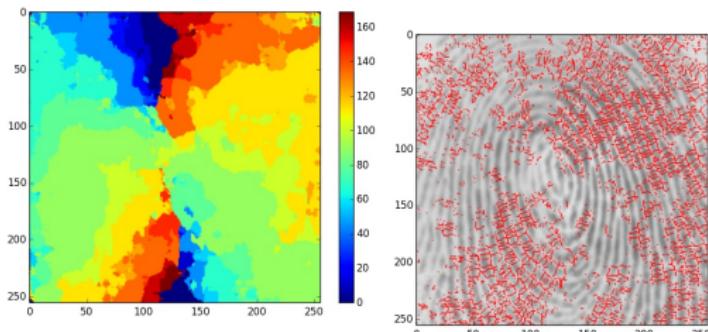
(f) Pixels retificados



(a) Original



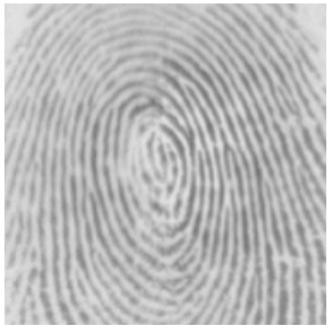
(b) Watershed



(c) Direção watershed

(d) Info. Direcional
retificada (fig. original)

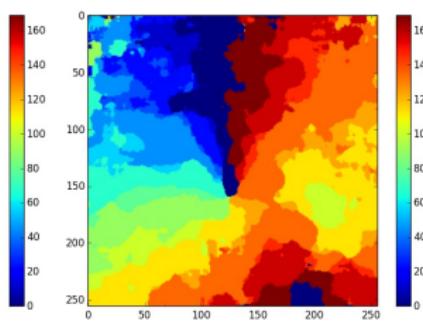
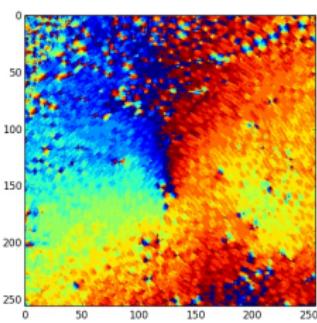
(e) Marcadores



(a) Original



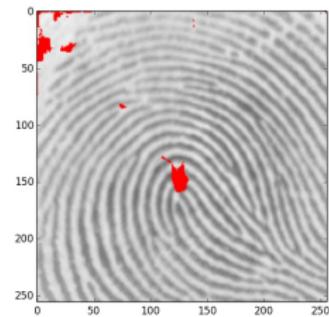
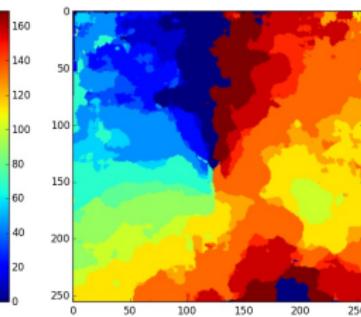
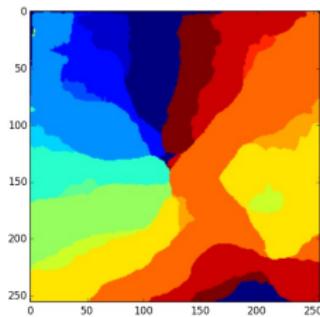
(b) Resultado final



(a) Original

(b) Info. Direcional

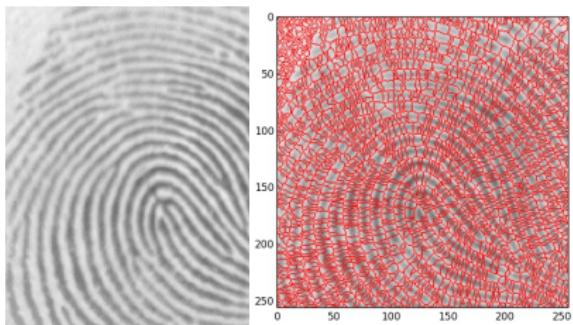
(c) Janela 15x15



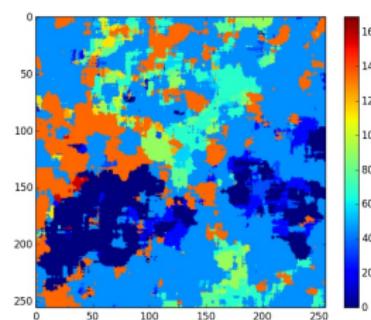
(d) Janela 45x45

(e) Retificado

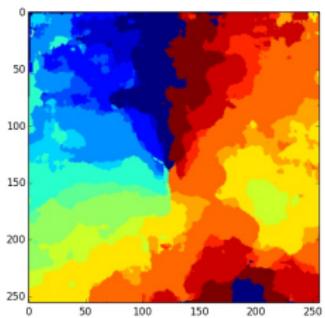
(f) Pixels retificados



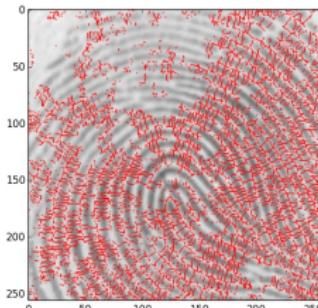
(a) Original



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



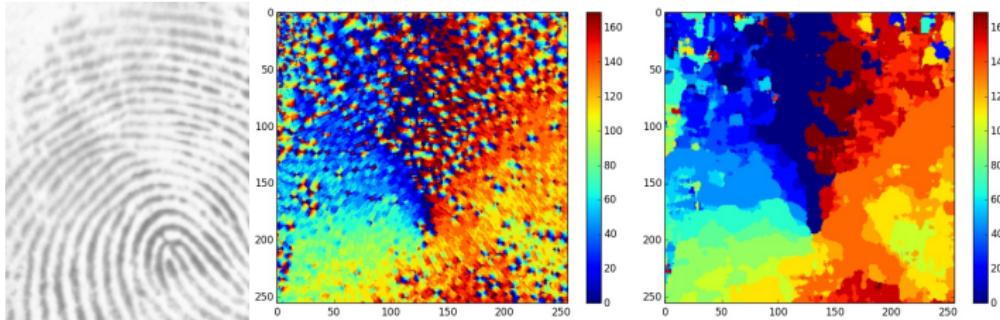
(e) Marcadores



(a) Original



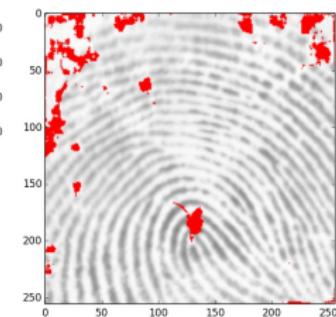
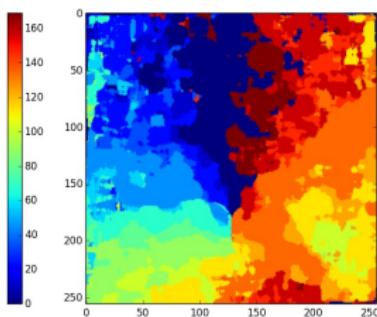
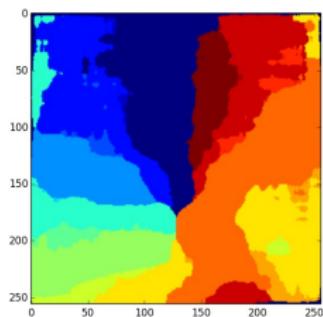
(b) Resultado final



(a) Original

(b) Info. Direcional

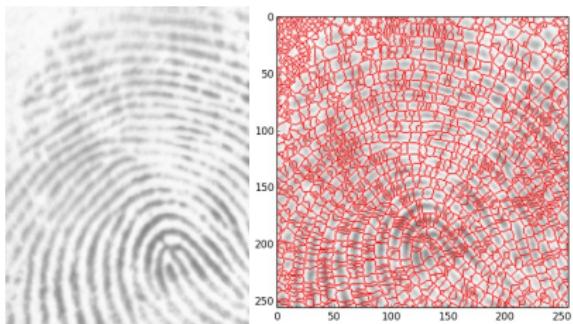
(c) Janela 15x15



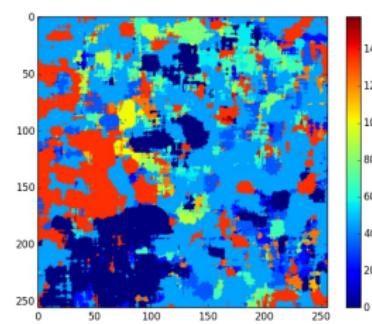
(d) Janela 45x45

(e) Retificado

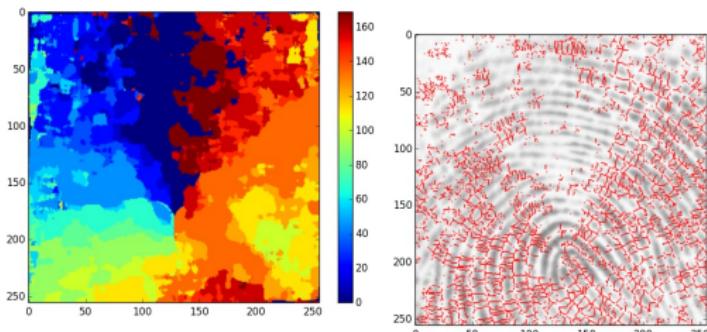
(f) Pixels retificados



(a) Original



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

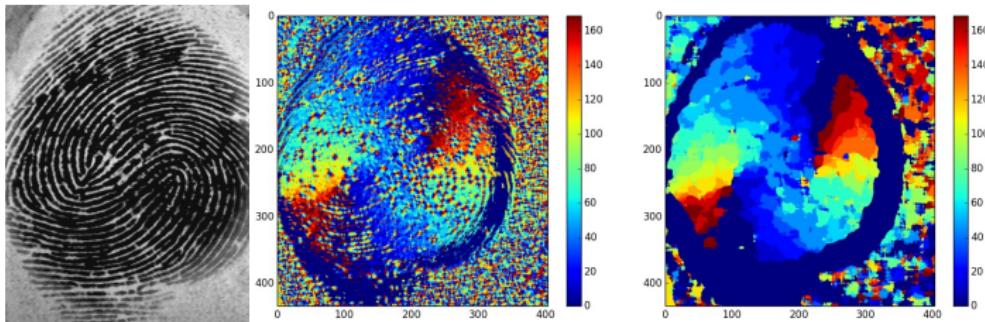
(e) Marcadores



(a) Original



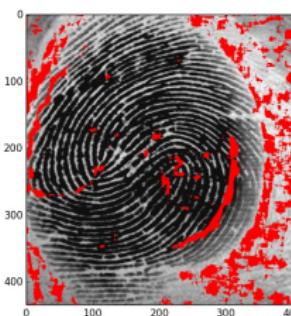
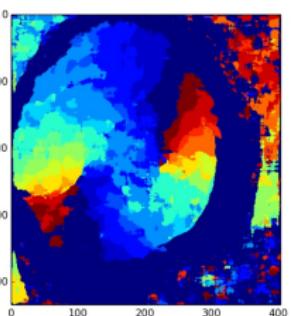
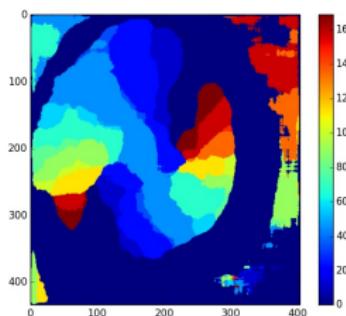
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



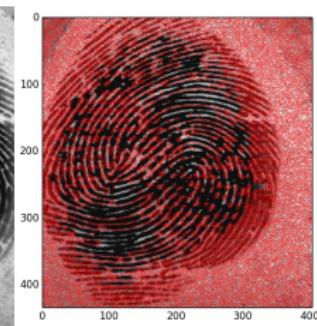
(d) Janela 45x45

(e) Retificado

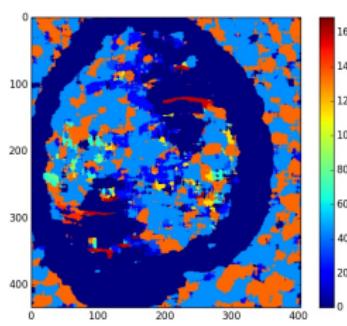
(f) Pixels retificados



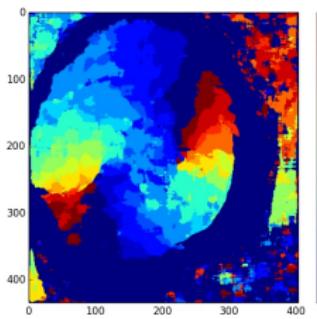
(a) Original



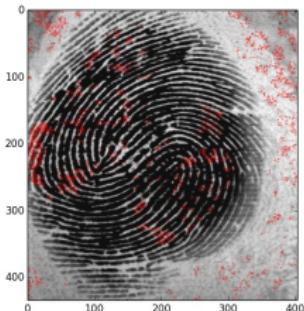
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



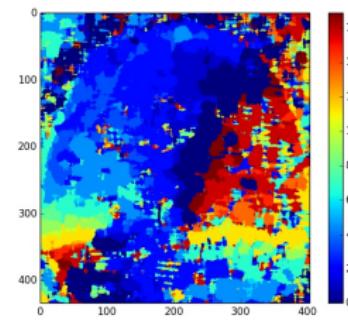
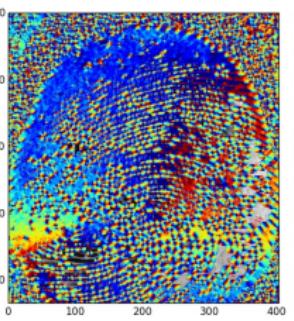
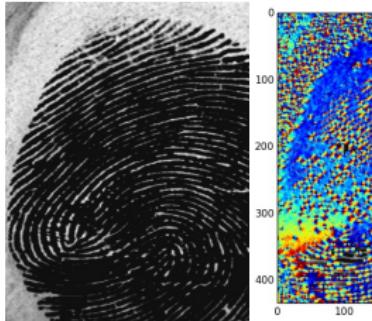
(e) Marcadores



(a) Original



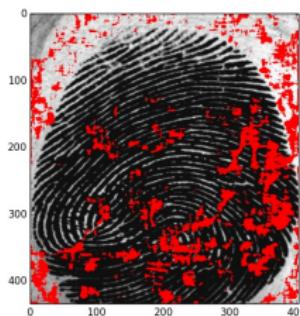
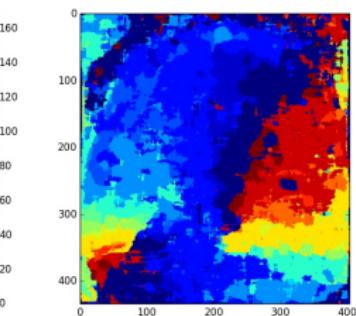
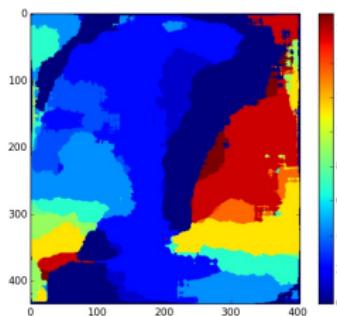
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15×15



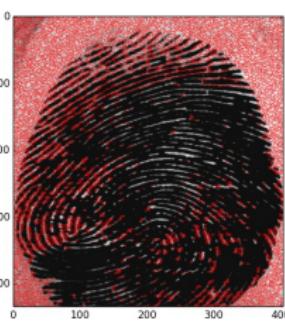
(d) Janela 45×45

(e) Retificado

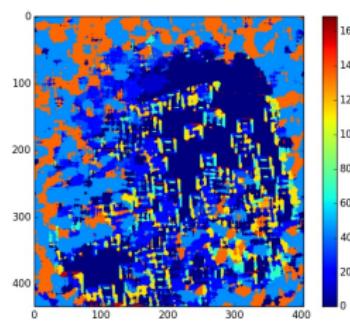
(f) Pixels retificados



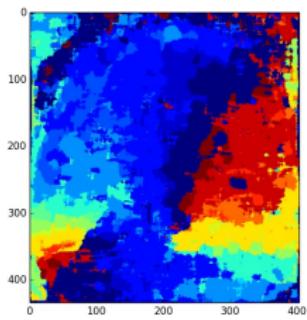
(a) Original



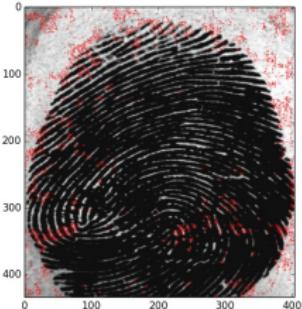
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



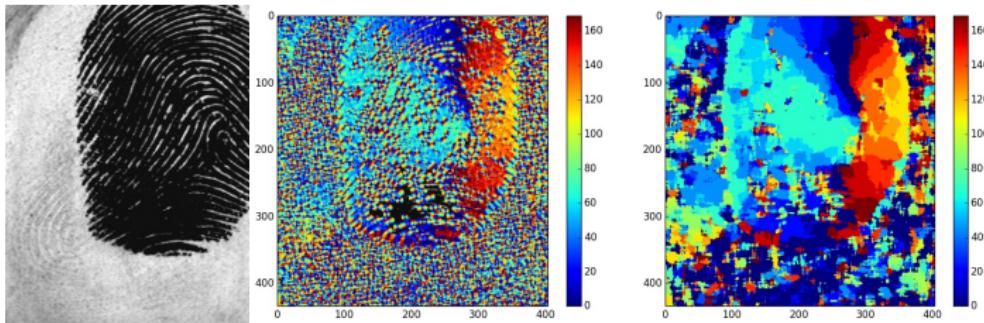
(e) Marcadores



(a) Original



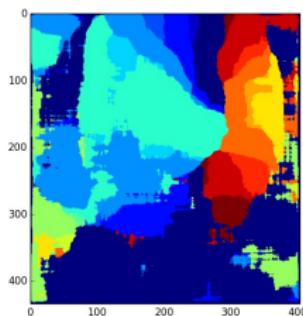
(b) Resultado final



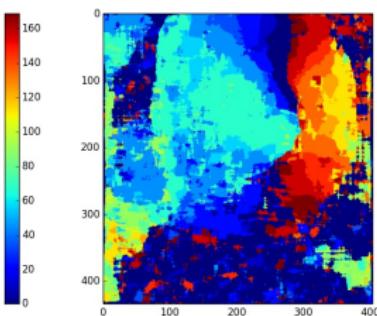
(a) Original

(b) Info. Direcional

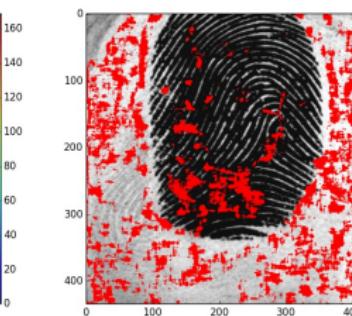
(c) Janela 15x15



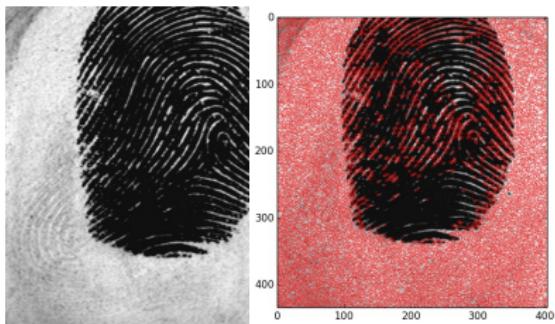
(d) Janela 45x45



(e) Retificado

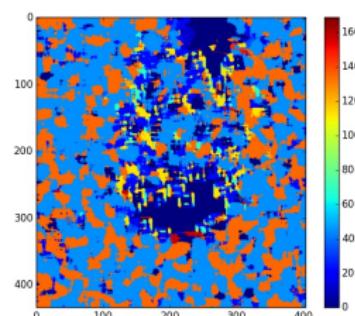


(f) Pixels retificados

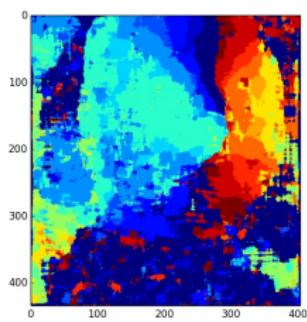


(a) Original

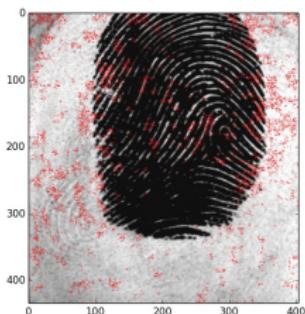
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



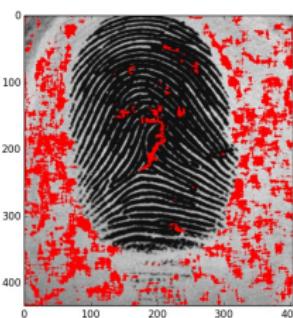
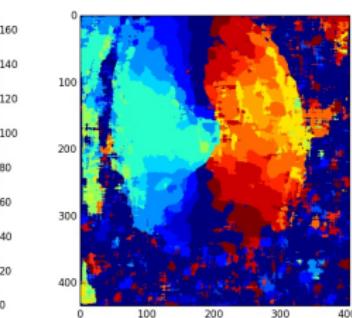
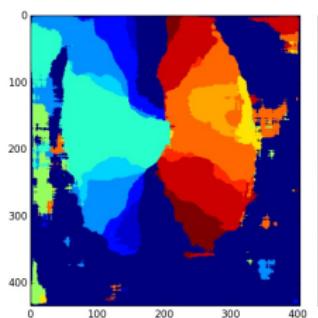
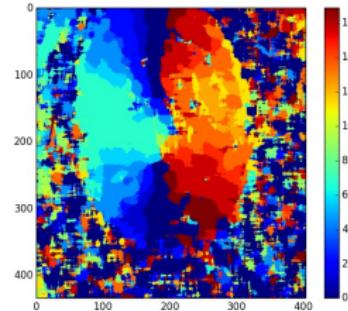
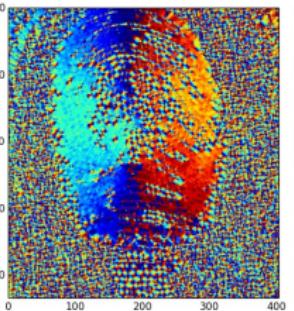
(e) Marcadores

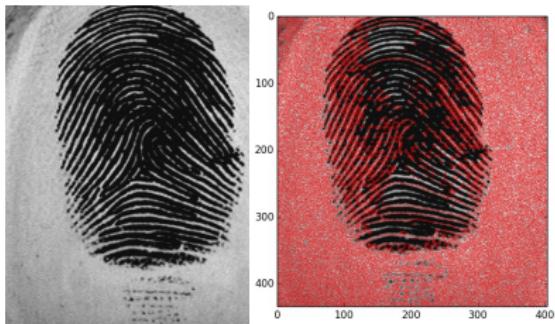


(a) Original



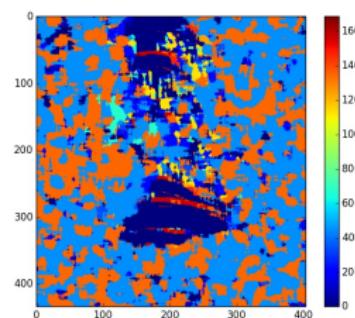
(b) Resultado final



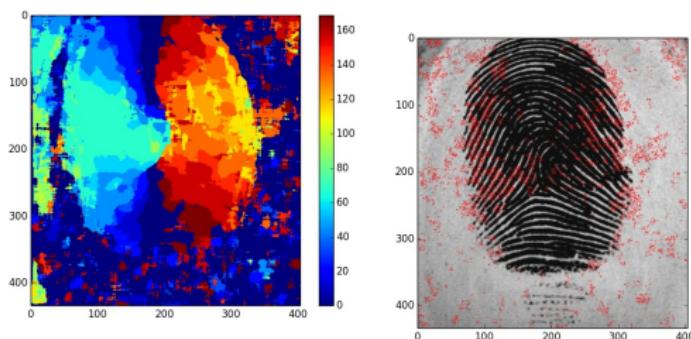


(a) Original

(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

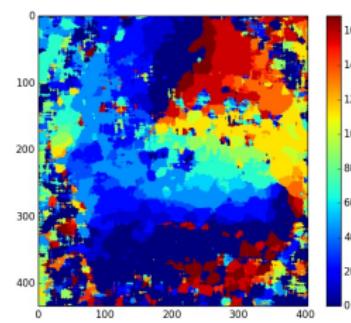
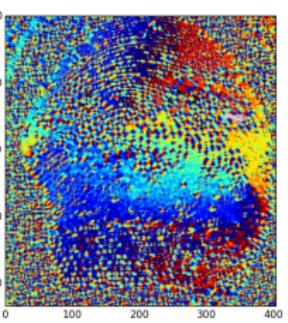
(e) Marcadores



(a) Original



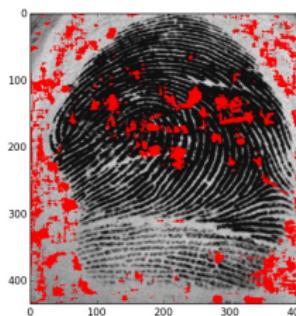
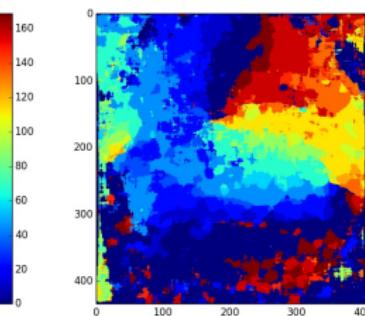
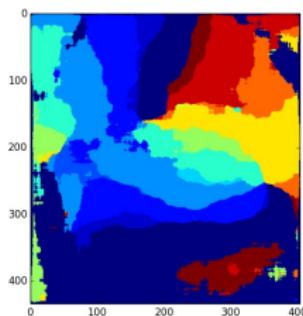
(b) Resultado final



(a) Original

(b) Info. Direcional

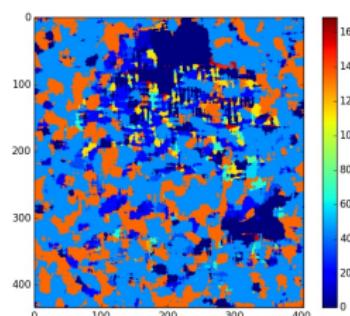
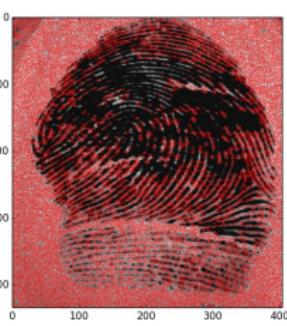
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

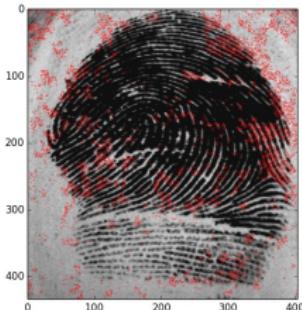
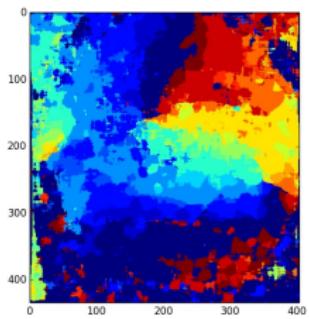
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

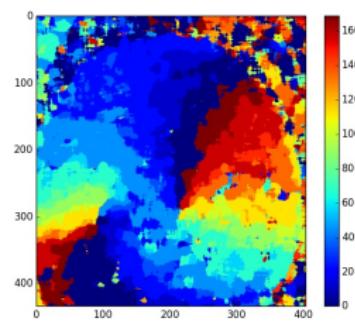
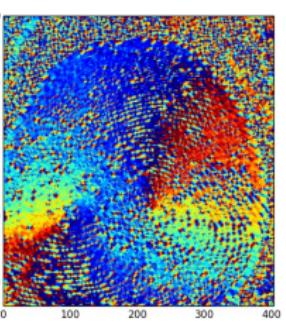
(e) Marcadores



(a) Original



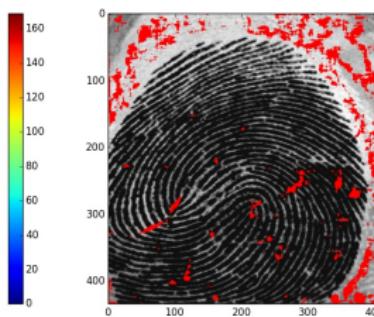
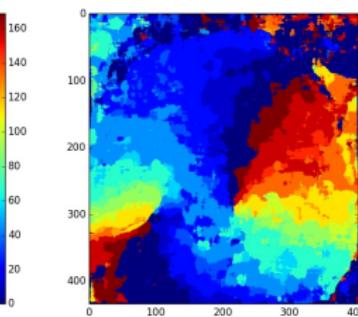
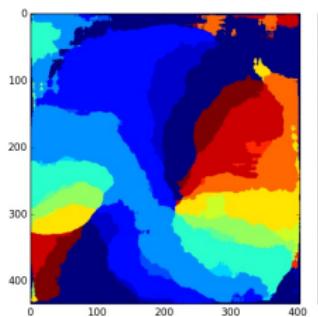
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



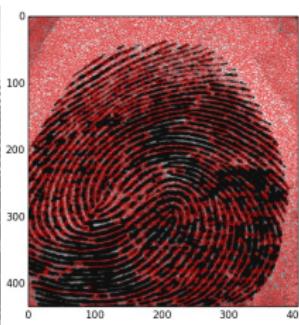
(d) Janela 45x45

(e) Retificado

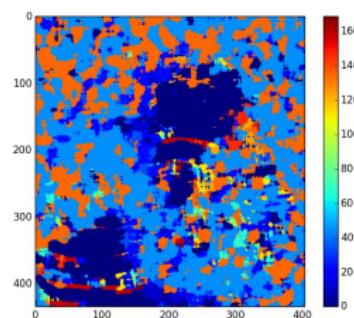
(f) Pixels retificados



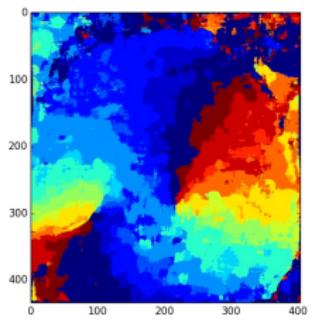
(a) Original



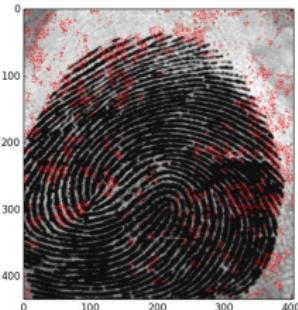
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



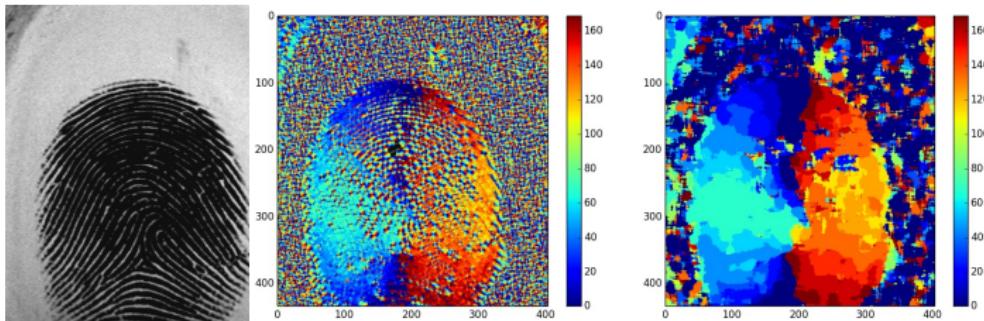
(e) Marcadores



(a) Original



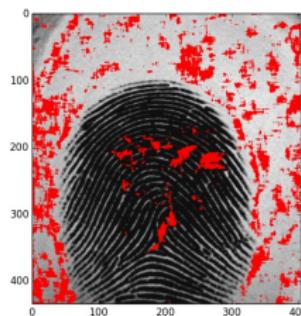
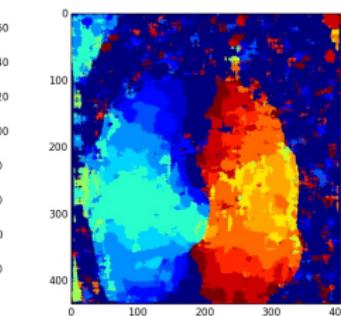
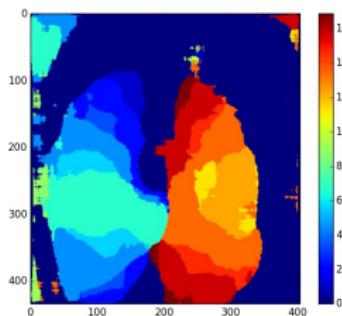
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



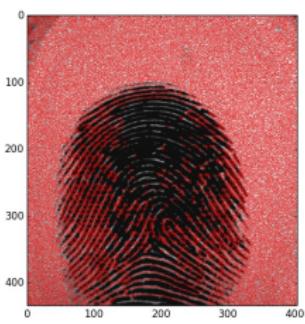
(d) Janela 45x45

(e) Retificado

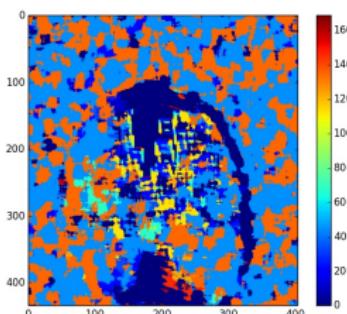
(f) Pixels retificados



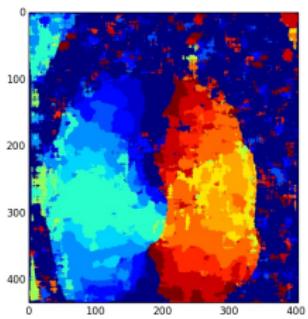
(a) Original



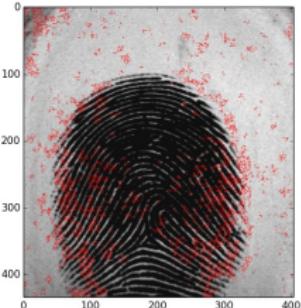
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



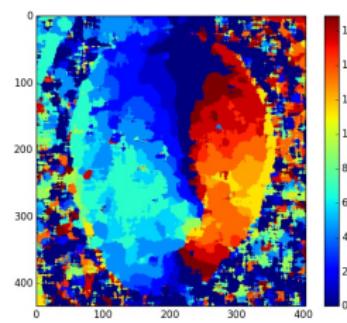
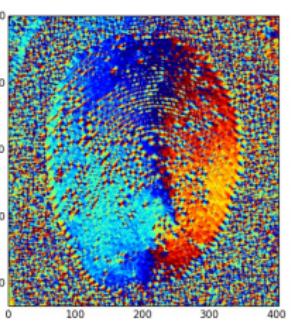
(e) Marcadores



(a) Original



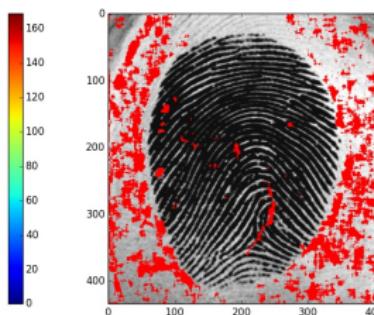
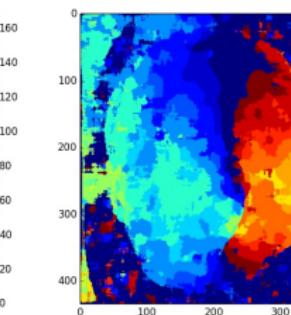
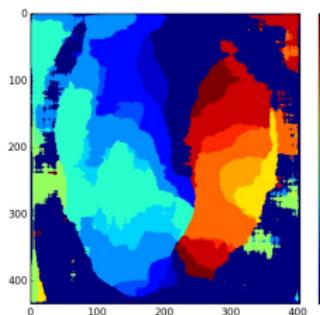
(b) Resultado final



(a) Original

(b) Info. Direcional

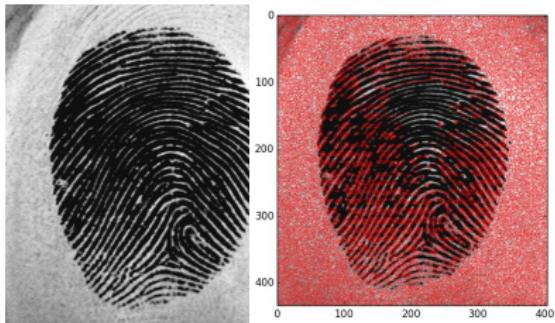
(c) Janela 15x15



(d) Janela 45x45

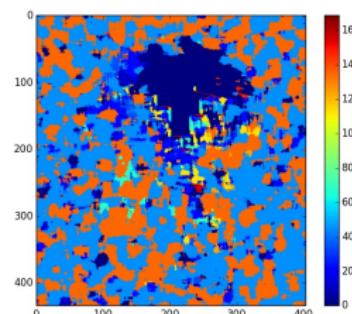
(e) Retificado

(f) Pixels retificados

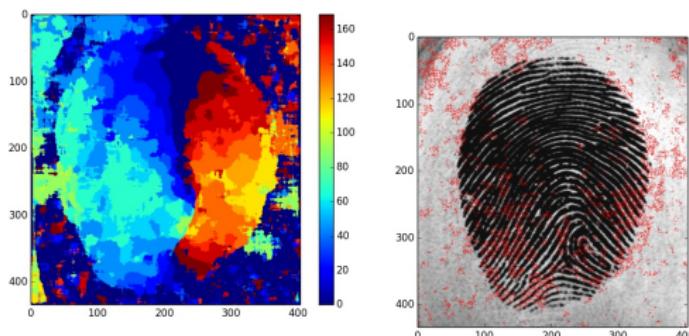


(a) Original

(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

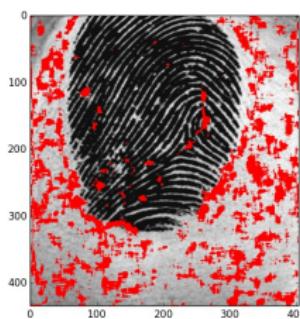
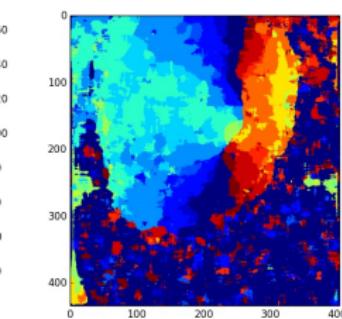
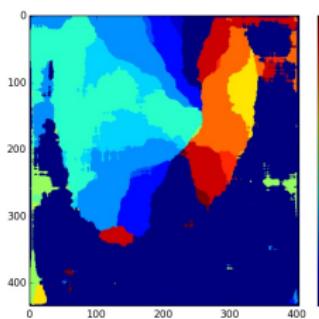
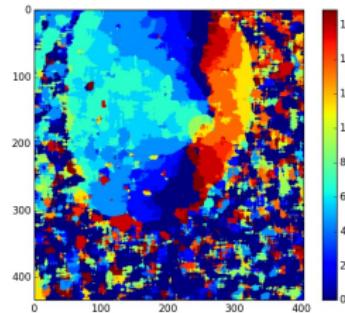
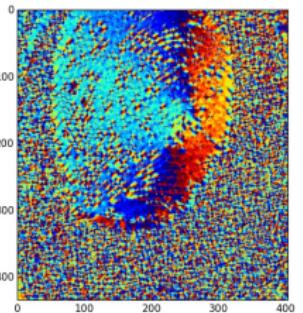
(e) Marcadores



(a) Original

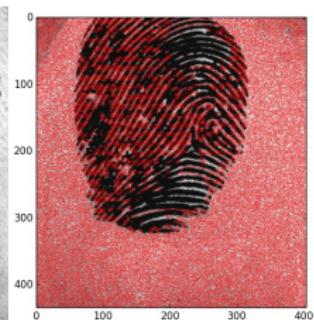


(b) Resultado final

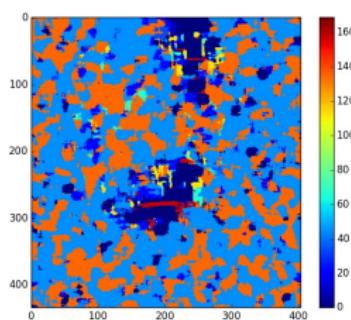




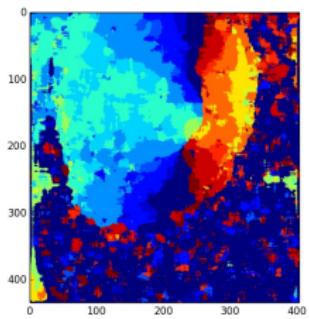
(a) Original



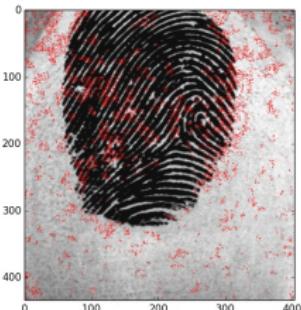
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



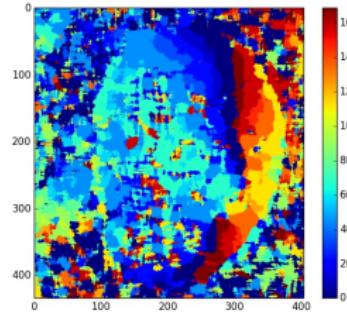
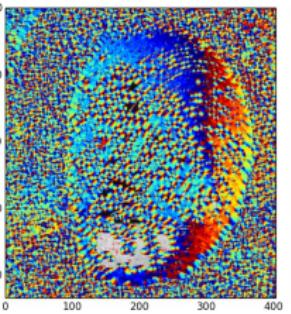
(e) Marcadores



(a) Original



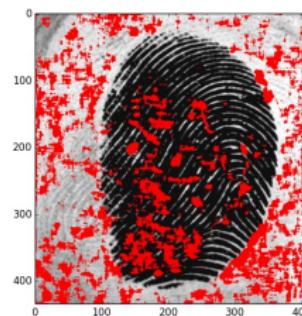
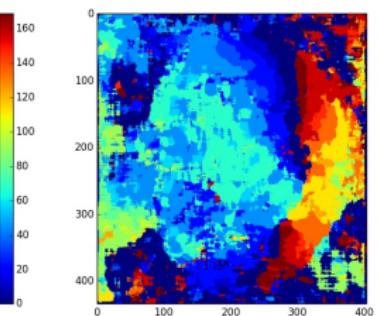
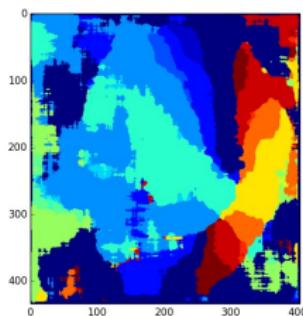
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



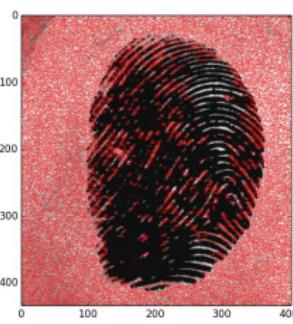
(d) Janela 45x45

(e) Retificado

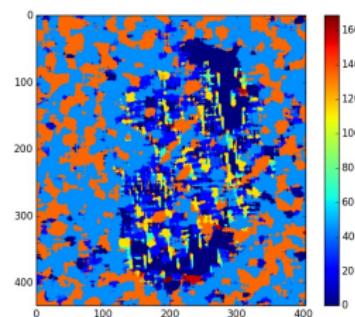
(f) Pixels retificados



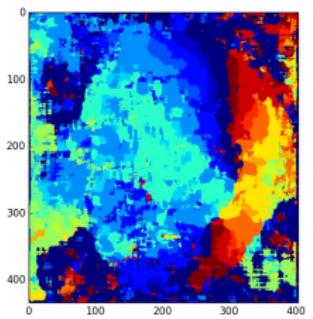
(a) Original



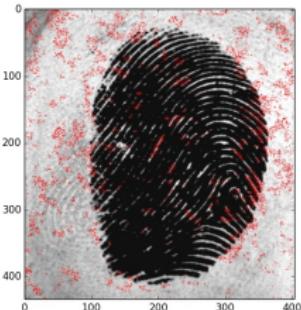
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



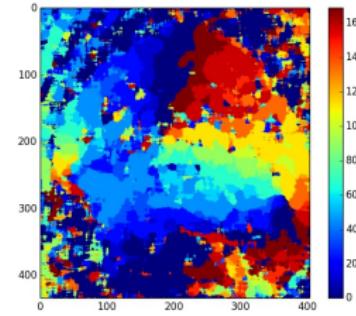
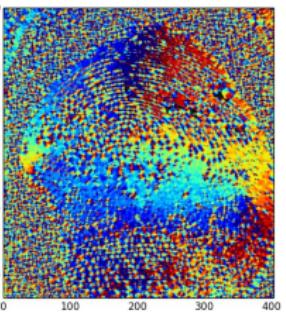
(e) Marcadores



(a) Original



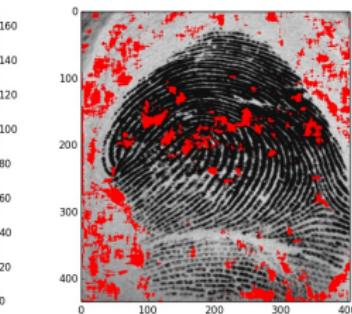
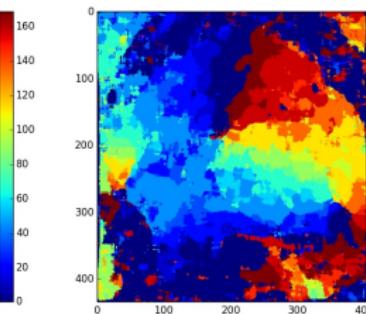
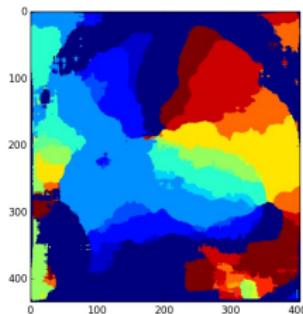
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



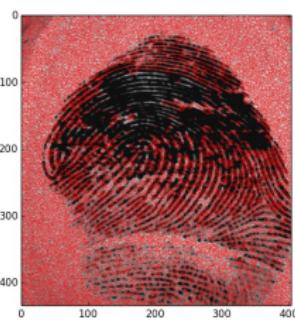
(d) Janela 45x45

(e) Retificado

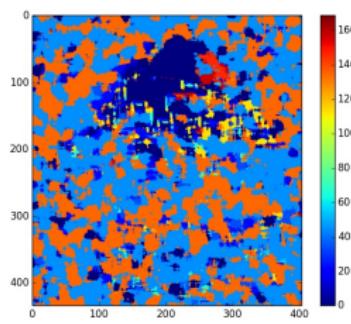
(f) Pixels retificados



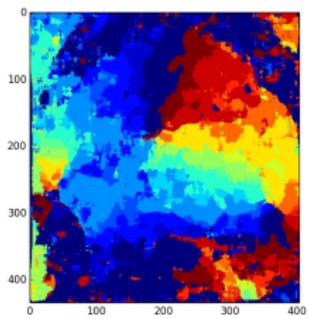
(a) Original



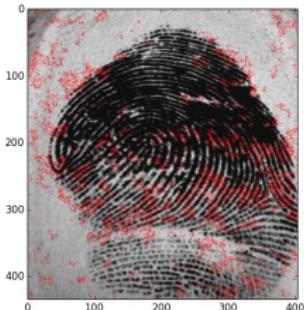
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



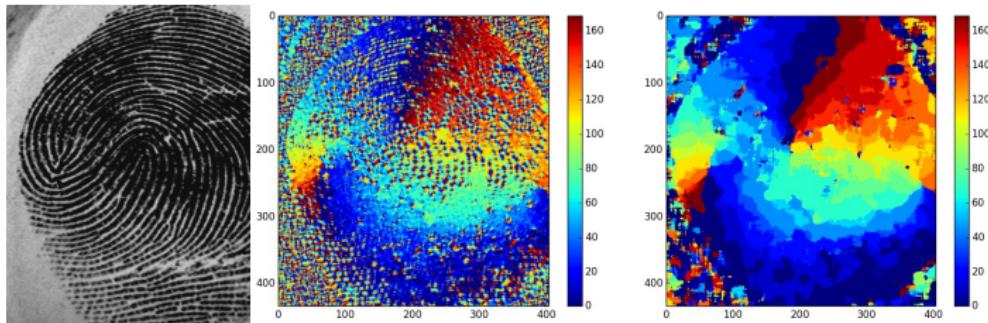
(e) Marcadores



(a) Original



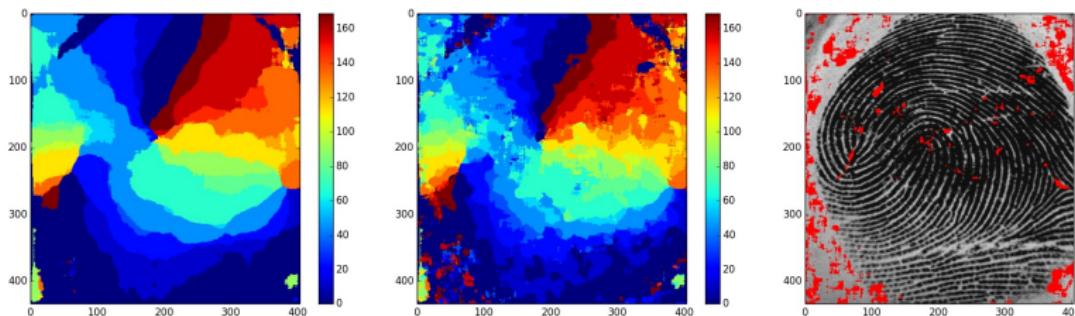
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



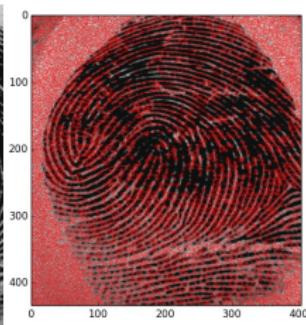
(d) Janela 45x45

(e) Retificado

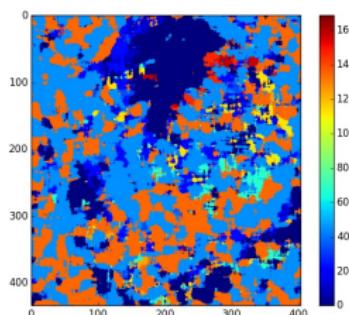
(f) Pixels retificados



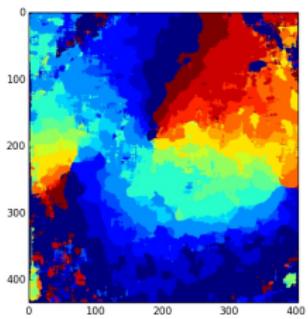
(a) Original



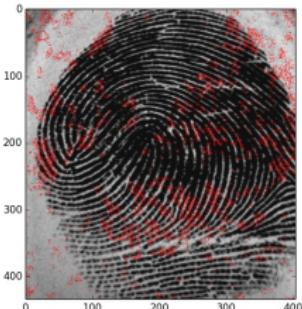
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



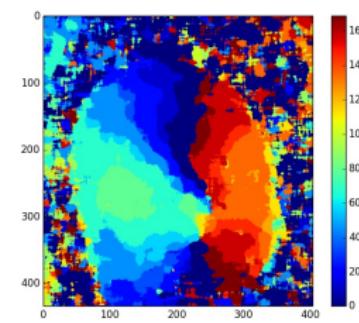
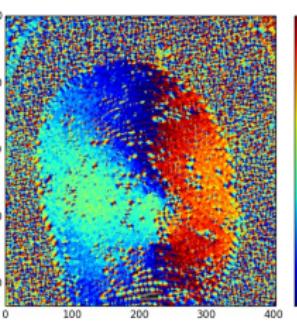
(e) Marcadores



(a) Original



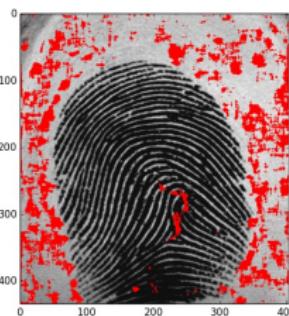
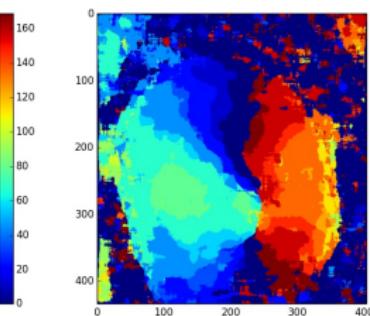
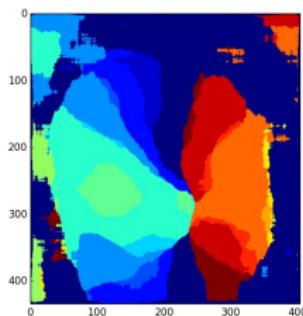
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



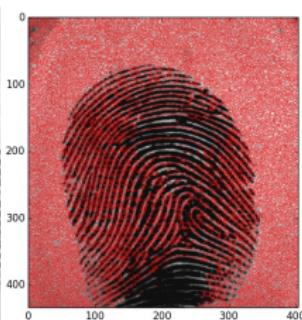
(d) Janela 45x45

(e) Retificado

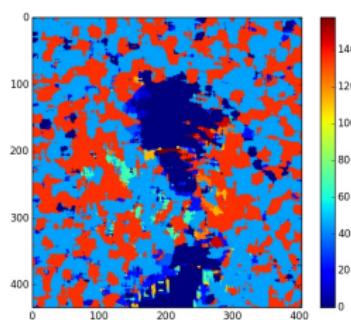
(f) Pixels retificados



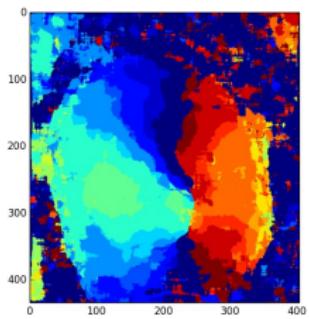
(a) Original



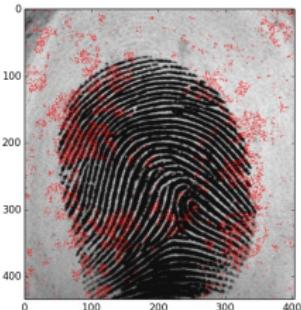
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



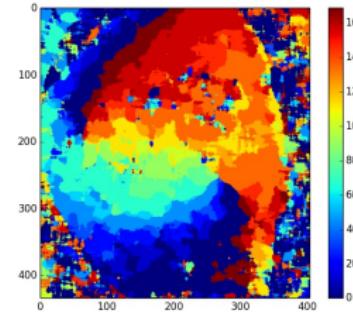
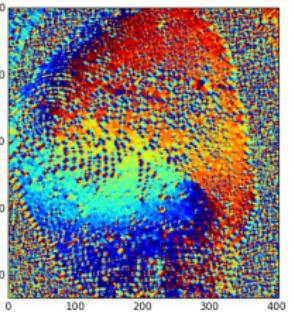
(e) Marcadores



(a) Original



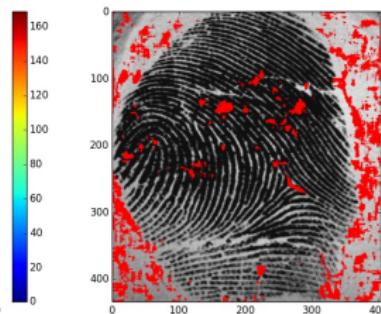
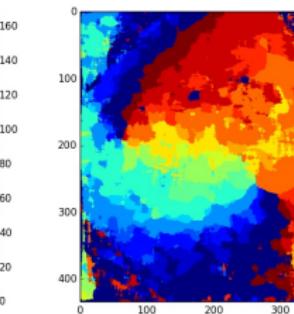
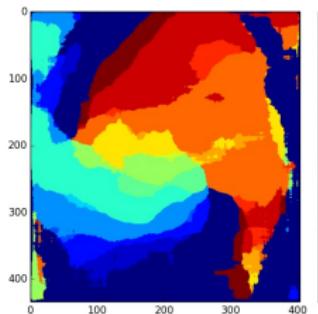
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



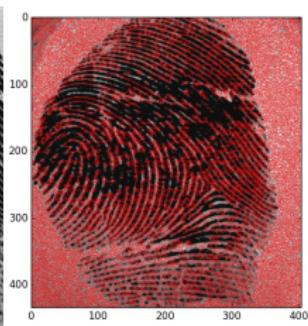
(d) Janela 45x45

(e) Retificado

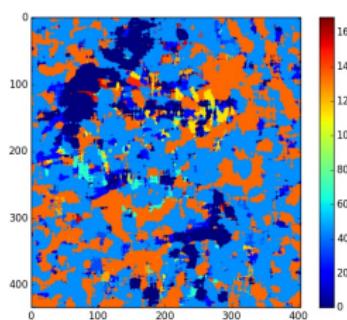
(f) Pixels retificados



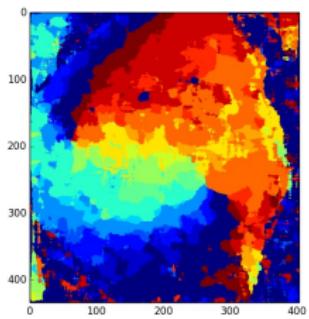
(a) Original



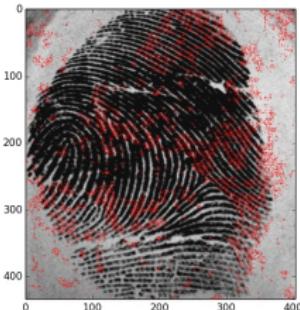
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



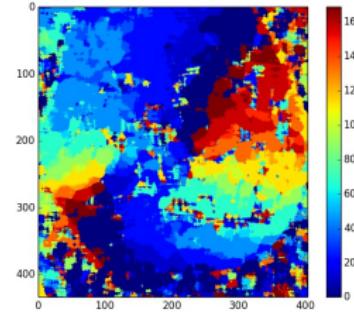
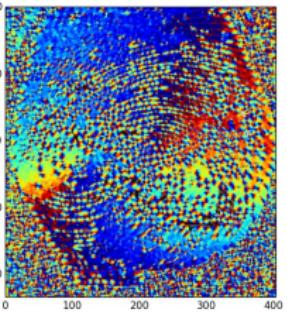
(e) Marcadores



(a) Original



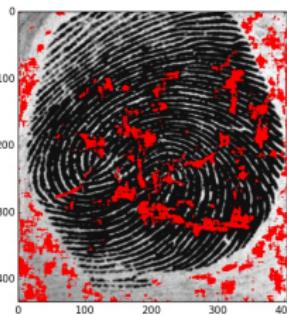
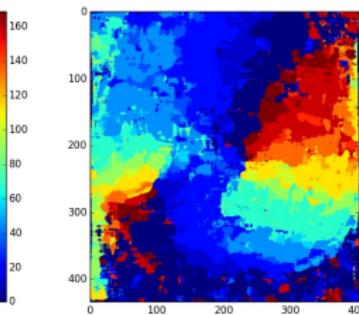
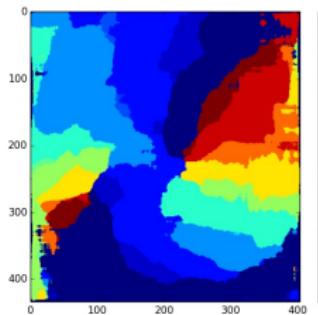
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



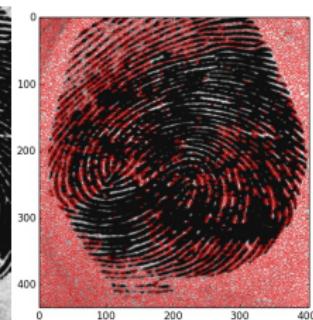
(d) Janela 45x45

(e) Retificado

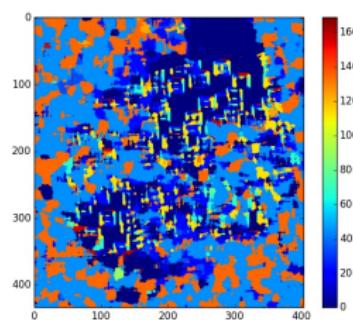
(f) Pixels retificados



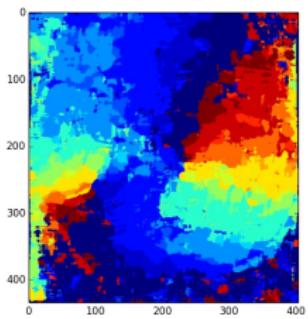
(a) Original



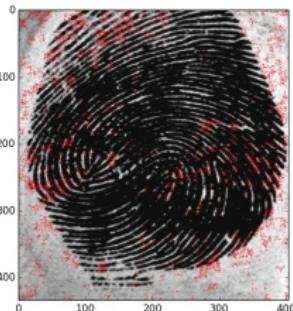
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



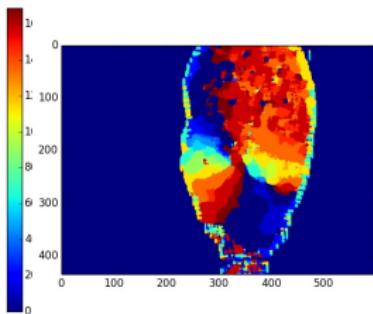
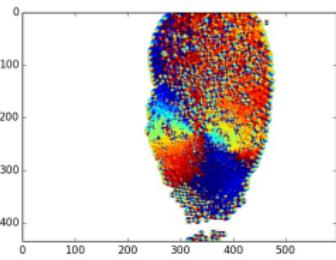
(e) Marcadores



(a) Original



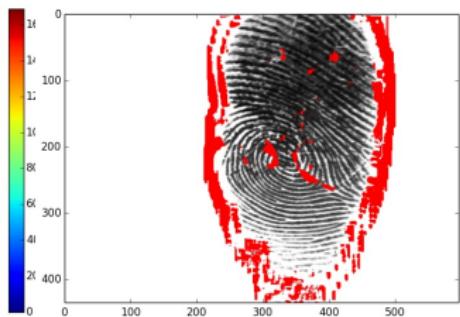
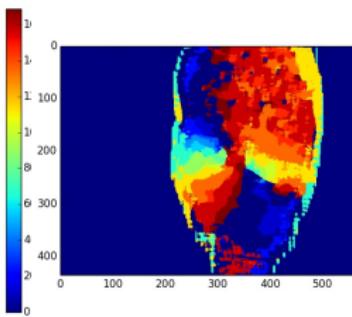
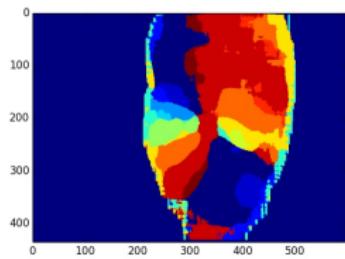
(b) Resultado final



(a) Original

(b) Info. Direcional

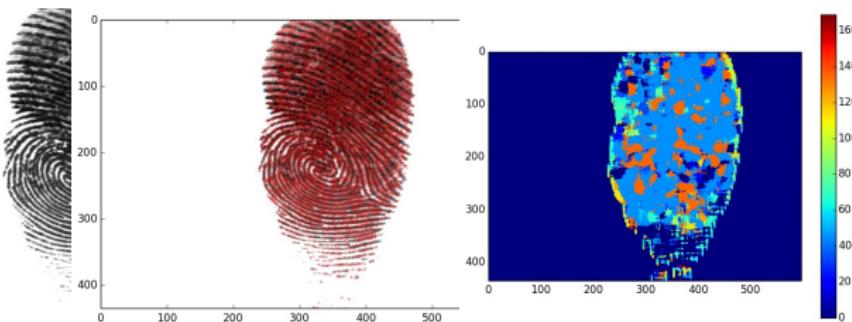
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

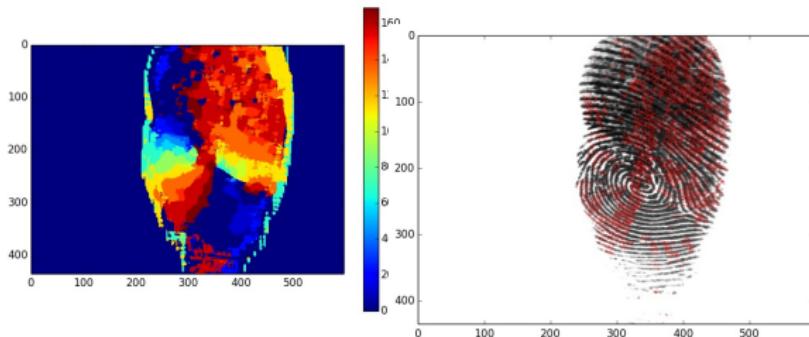
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

(e) Marcadores



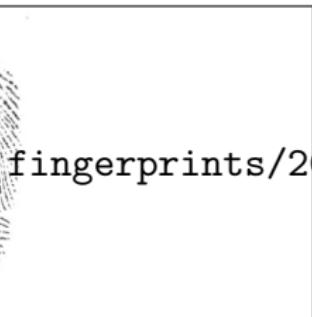
(a) Original



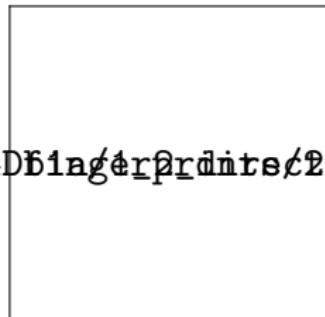
(b) Resultado final



(a) Original



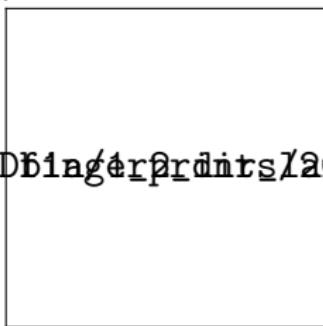
(b) Info. Direcional



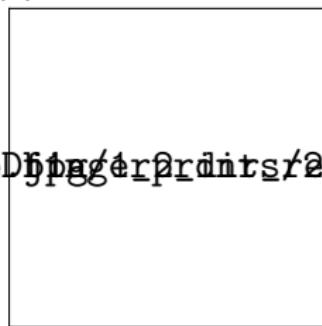
(c) Janela 15x15



(d) Janela 45x45



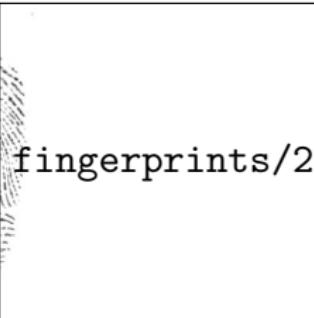
(e) Retificado



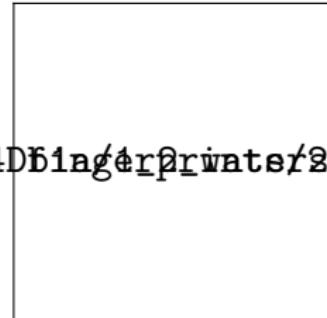
(f) Pixels retificados



(a) Original



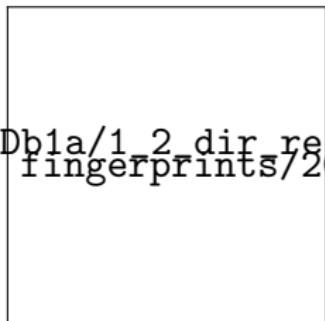
(b) Watershed



(c) Direção watershed



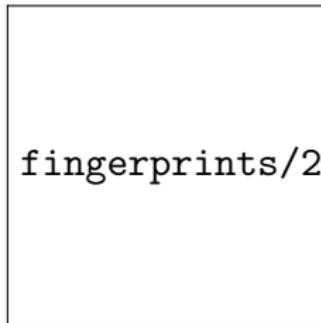
(d) Info. Direcional
retificada (fig. original)



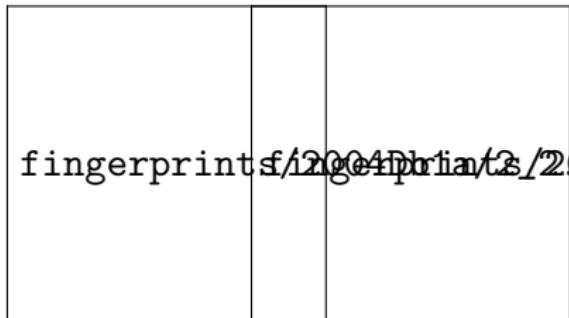
(e) Marcadores



(a) Original

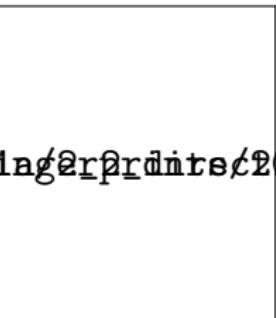


(b) Resultado final



(a) Original

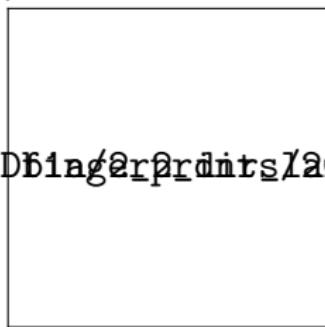
(b) Info. Direcional



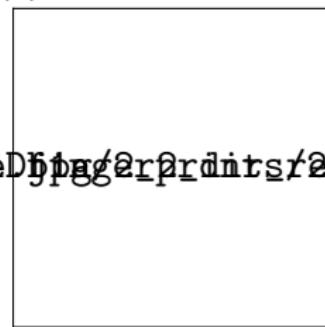
(c) Janela 15x15



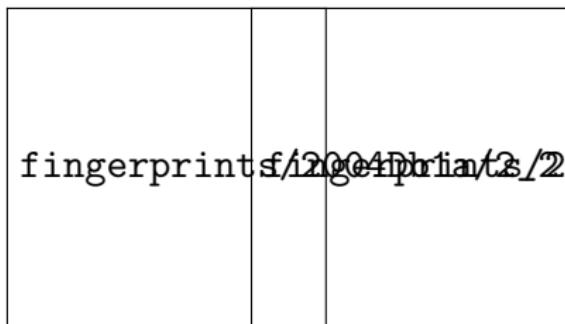
(d) Janela 45x45



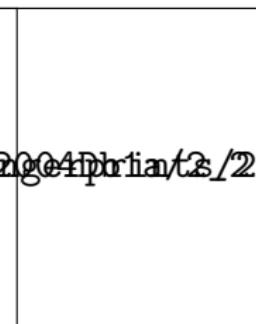
(e) Retificado



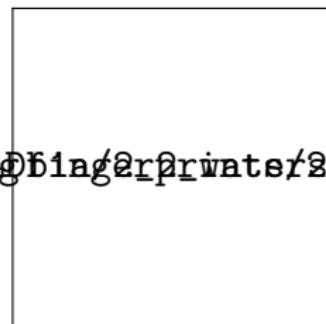
(f) Pixels retificados



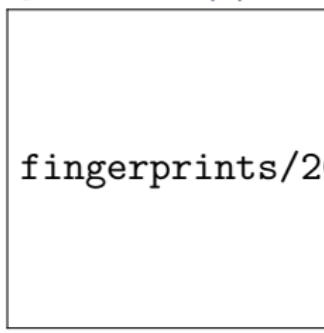
(a) Original



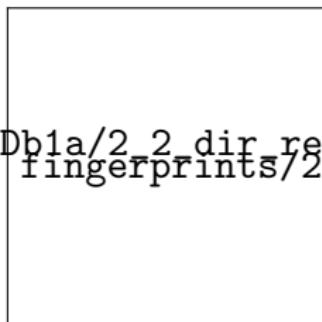
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



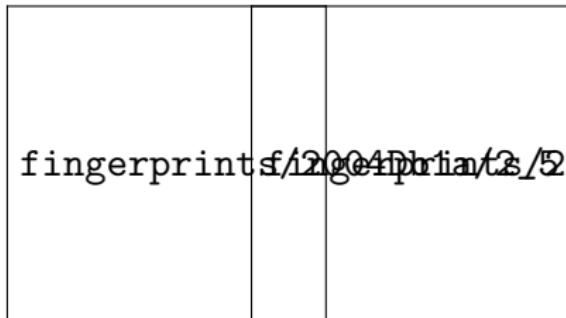
(e) Marcadores



(a) Original



(b) Resultado final



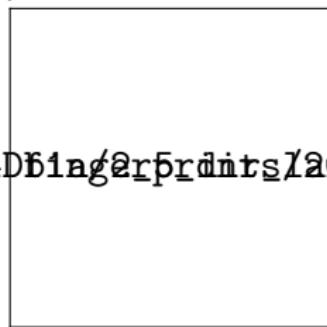
(a) Original

(b) Info. Direcional

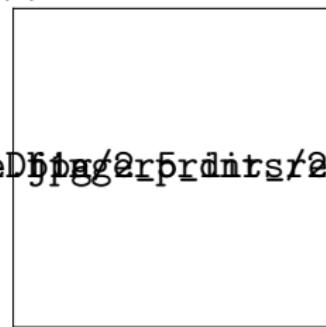
(c) Janela 15x15



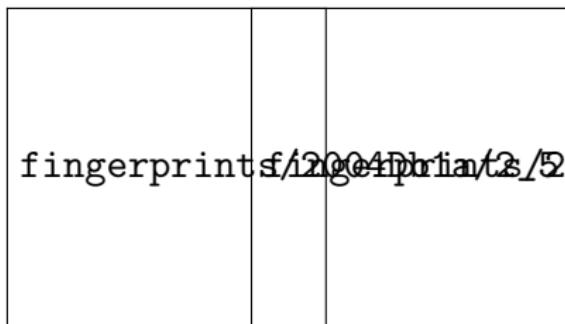
(d) Janela 45x45



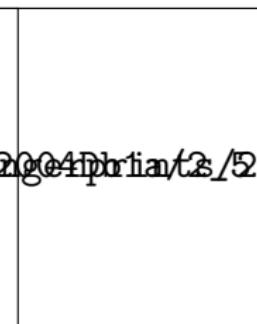
(e) Retificado



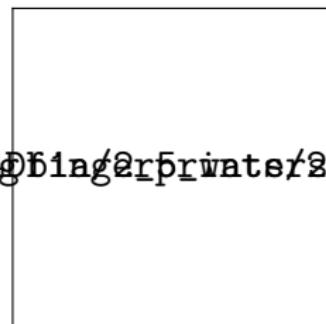
(f) Pixels retificados



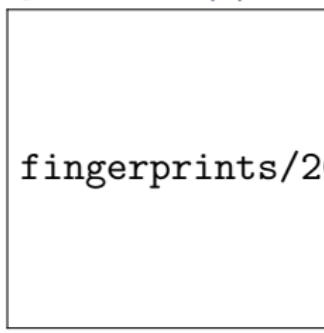
(a) Original



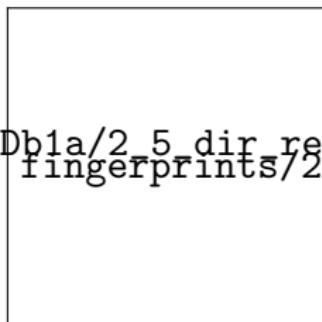
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



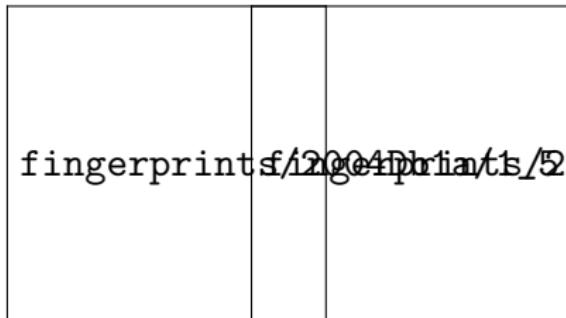
(e) Marcadores



(a) Original



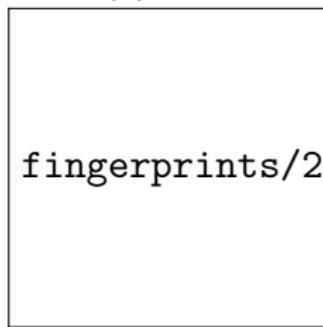
(b) Resultado final



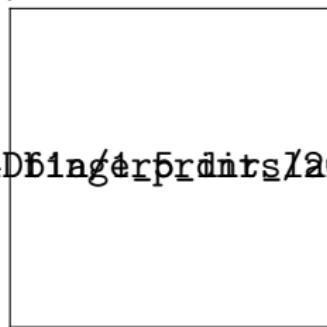
(a) Original

(b) Info. Direcional

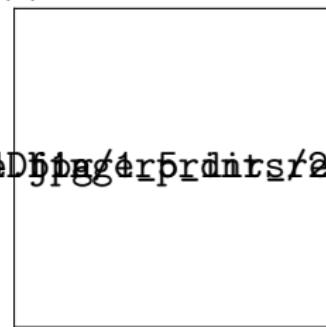
(c) Janela 15x15



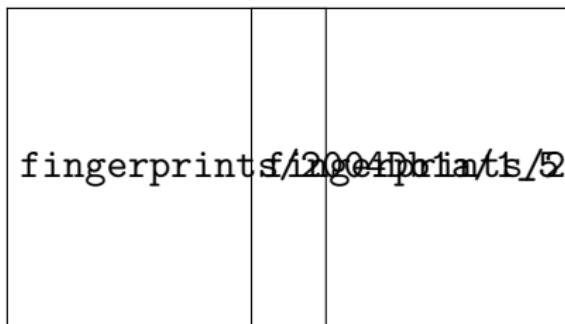
(d) Janela 45x45



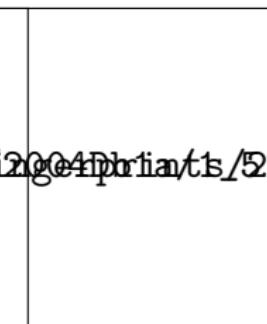
(e) Retificado



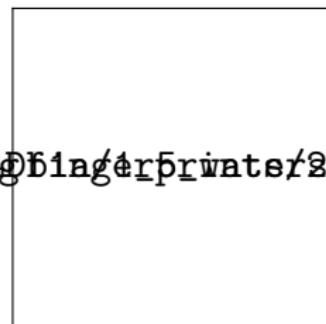
(f) Pixels retificados



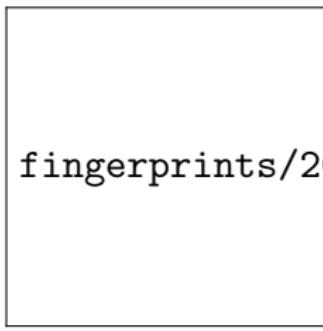
(a) Original



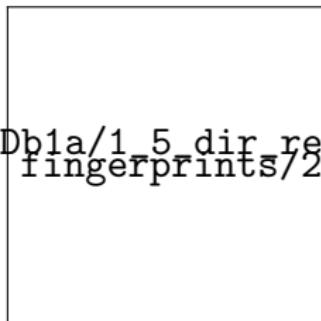
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



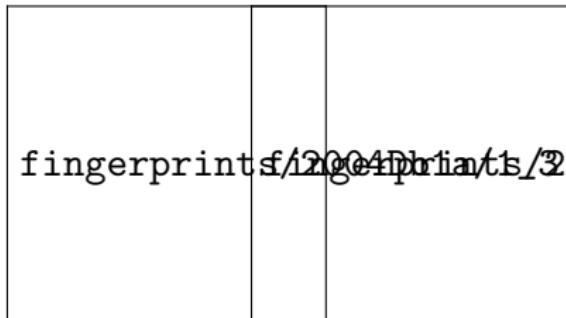
(e) Marcadores



(a) Original



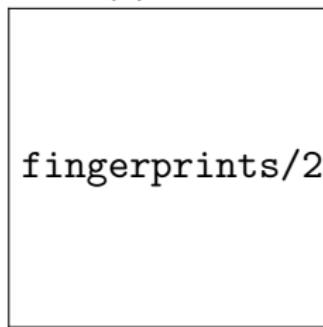
(b) Resultado final



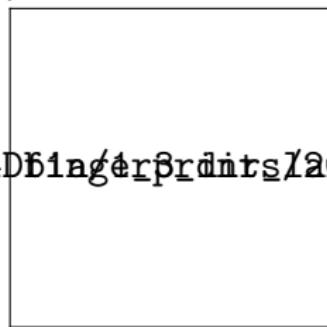
(a) Original

(b) Info. Direcional

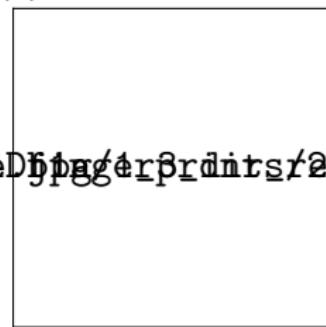
(c) Janela 15x15



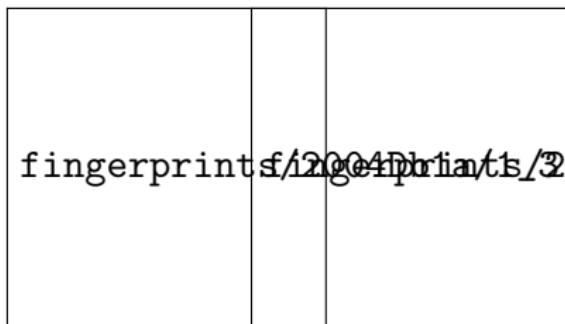
(d) Janela 45x45



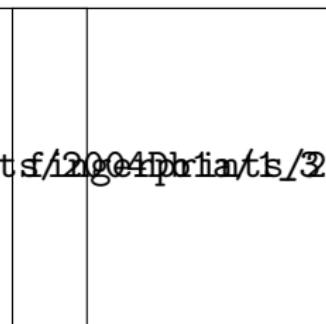
(e) Retificado



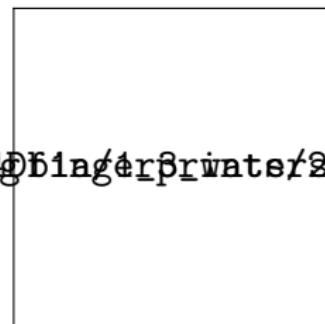
(f) Pixels retificados



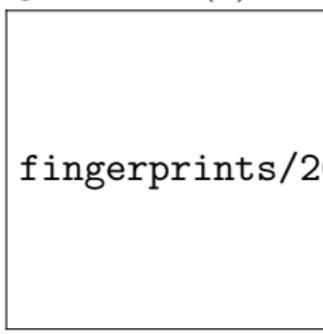
(a) Original



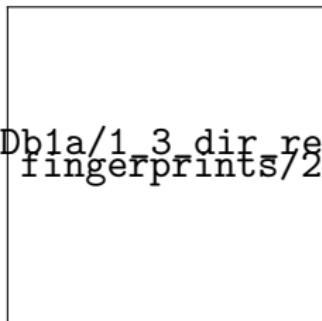
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



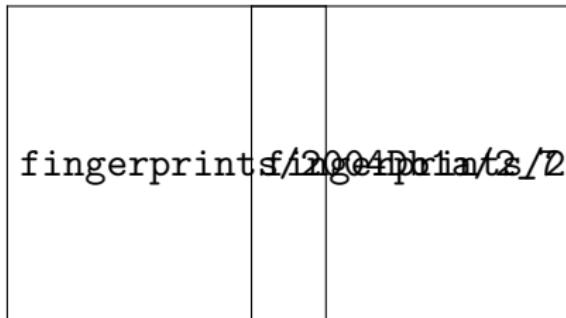
(e) Marcadores



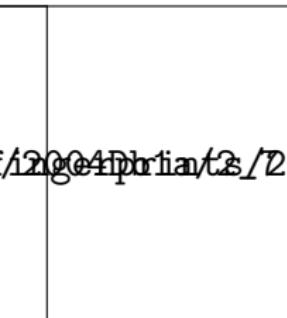
(a) Original



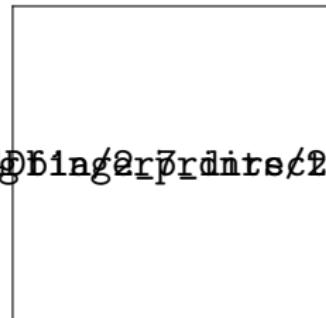
(b) Resultado final



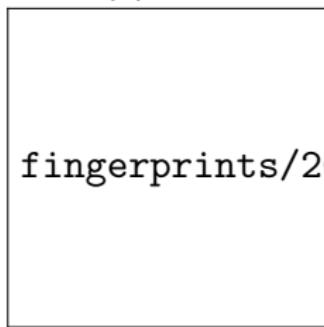
(a) Original



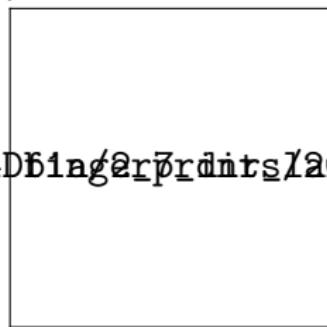
(b) Info. Direcional



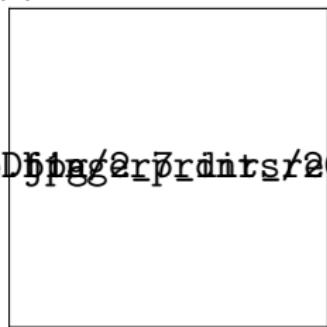
(c) Janela 15x15



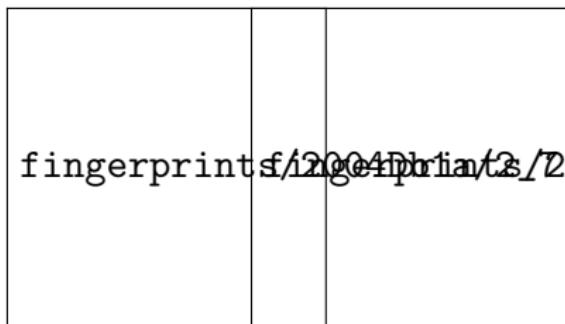
(d) Janela 45x45



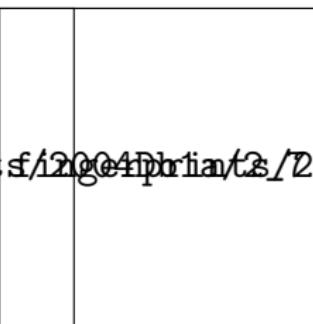
(e) Retificado



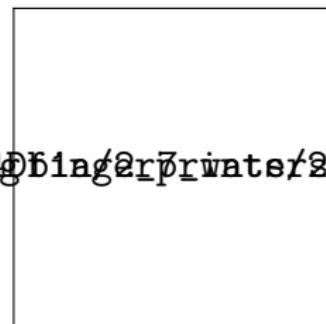
(f) Pixels retificados



(a) Original



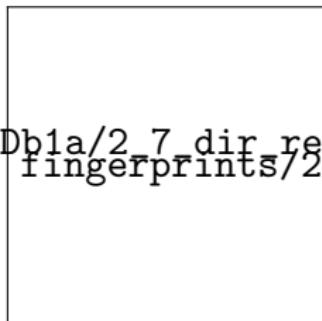
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



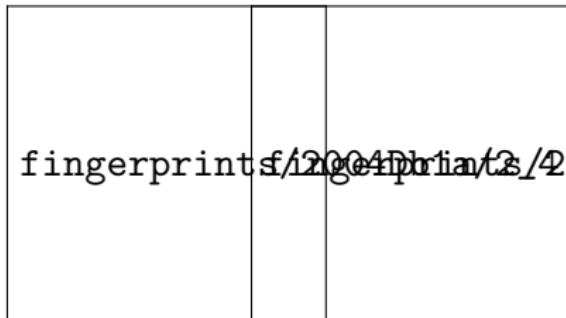
(e) Marcadores



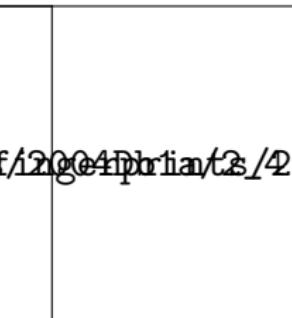
(a) Original



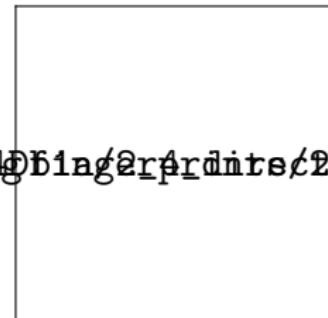
(b) Resultado final



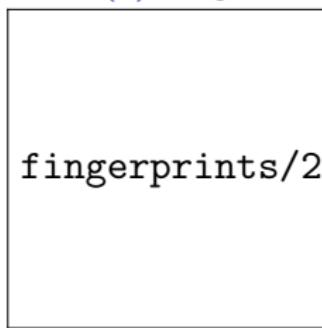
(a) Original



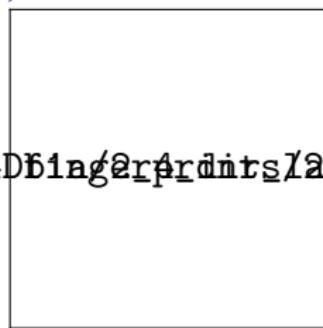
(b) Info. Direcional



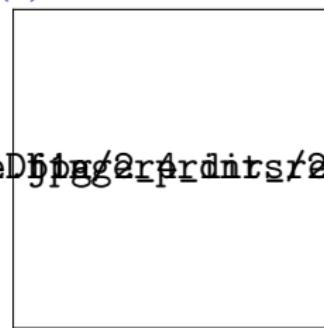
(c) Janela 15x15



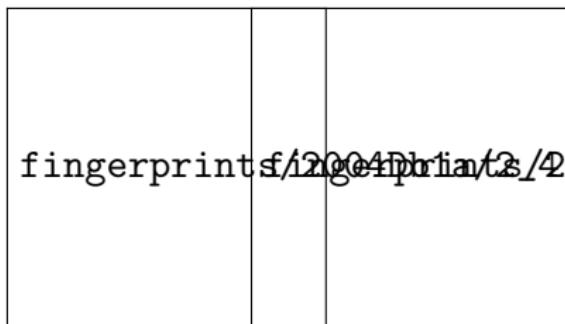
(d) Janela 45x45



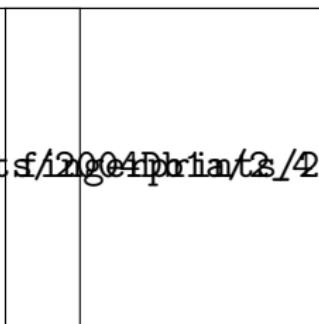
(e) Retificado



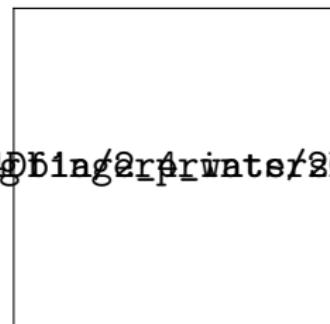
(f) Pixels retificados



(a) Original



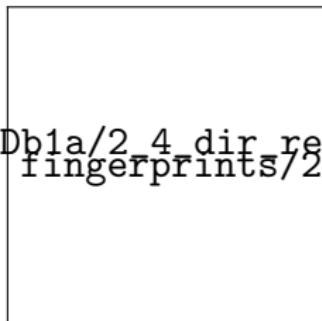
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



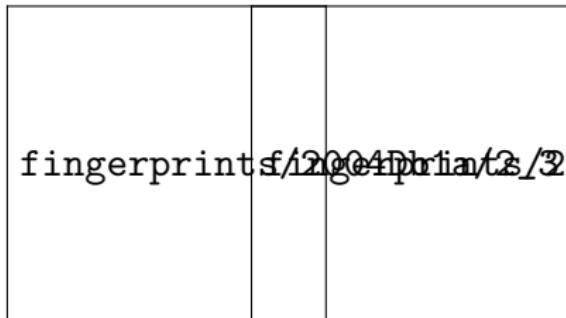
(e) Marcadores



(a) Original

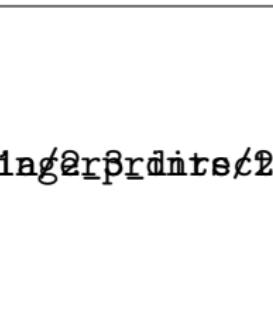


(b) Resultado final



(a) Original

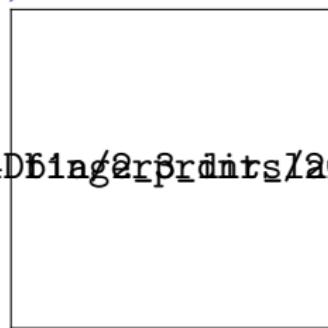
(b) Info. Direcional



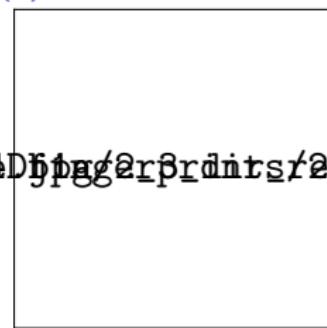
(c) Janela 15x15



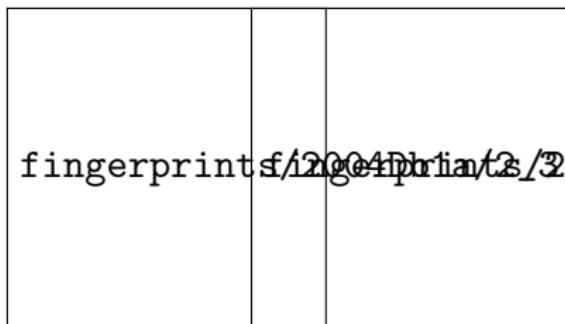
(d) Janela 45x45



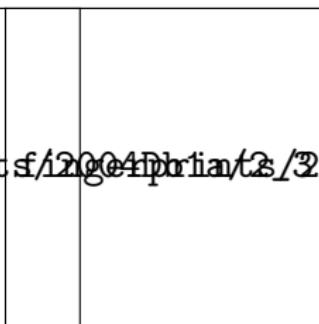
(e) Retificado



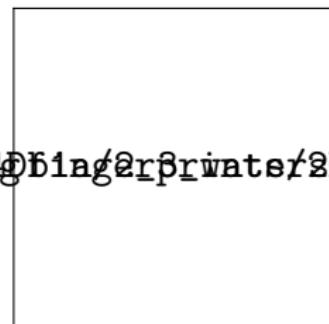
(f) Pixels retificados



(a) Original



(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



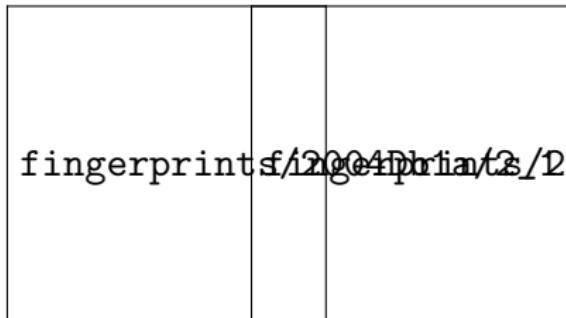
(e) Marcadores



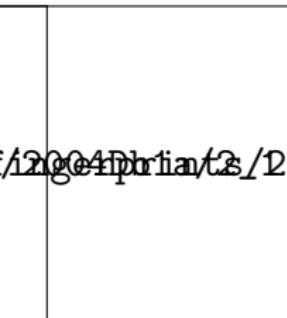
(a) Original



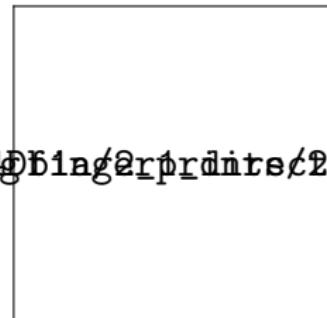
(b) Resultado final



(a) Original



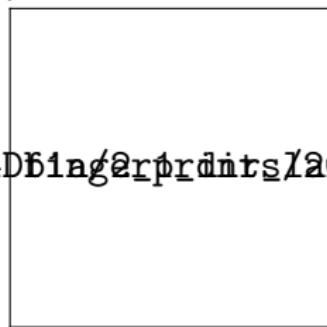
(b) Info. Direcional



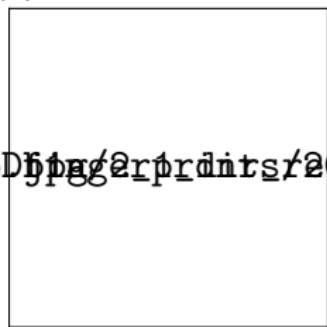
(c) Janela 15x15



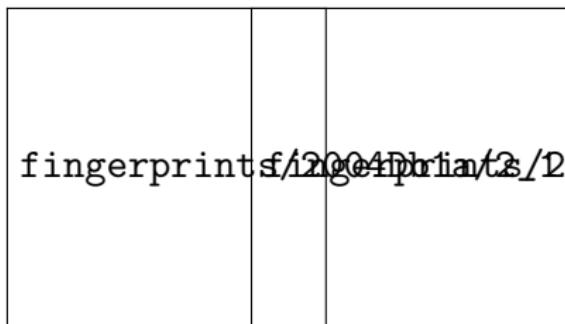
(d) Janela 45x45



(e) Retificado

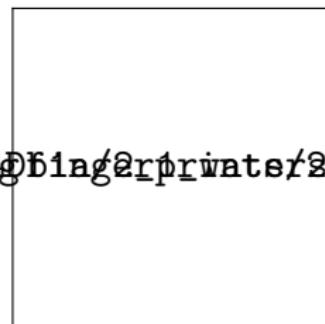


(f) Pixels retificados



(a) Original

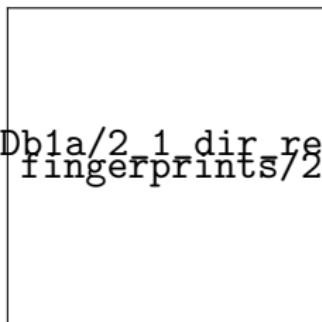
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



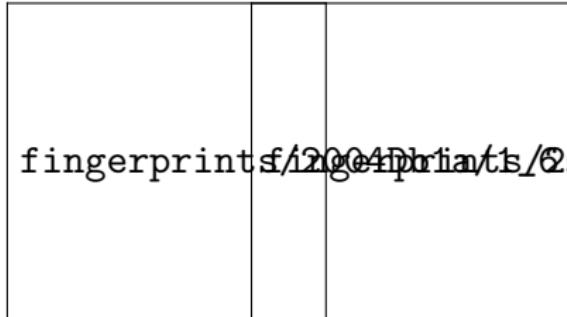
(e) Marcadores



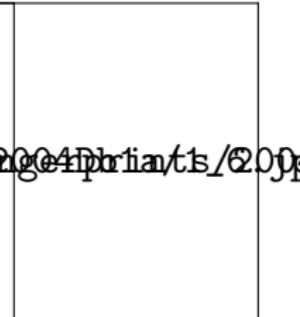
(a) Original



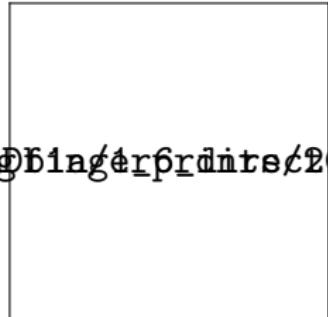
(b) Resultado final



(a) Original



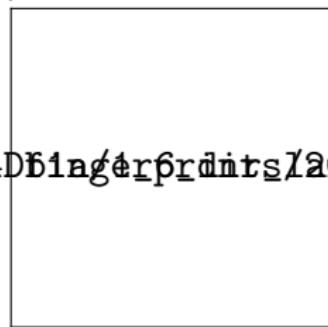
(b) Info. Direcional



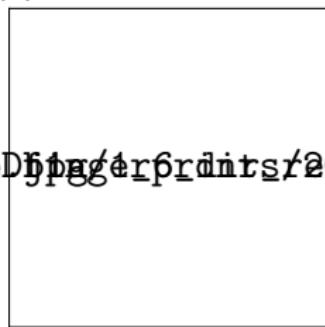
(c) Janela 15x15



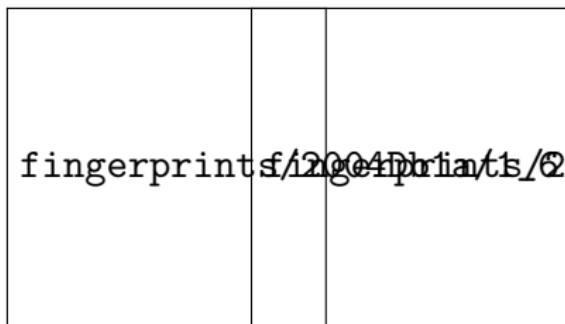
(d) Janelia 45x45



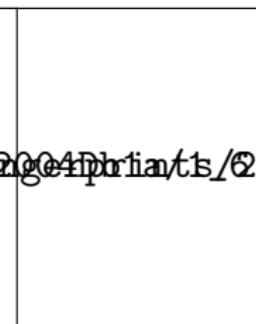
(e) Retificado



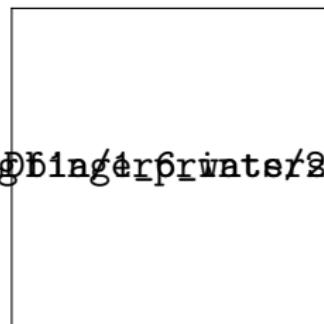
(f) Pixels retificados



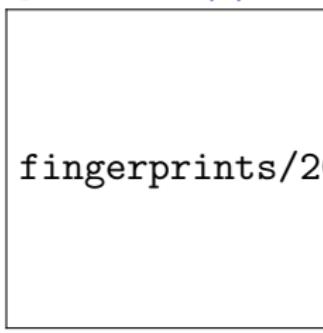
(a) Original



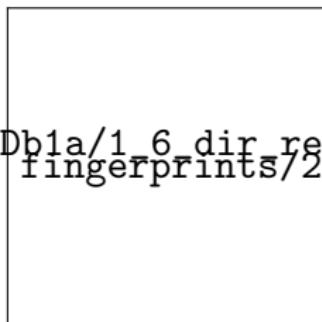
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



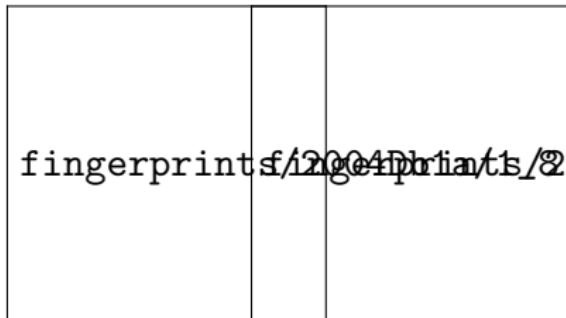
(e) Marcadores



(a) Original

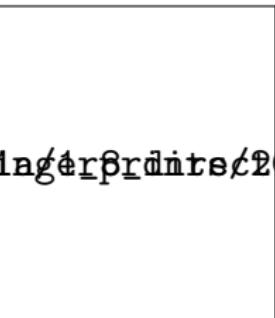


(b) Resultado final



(a) Original

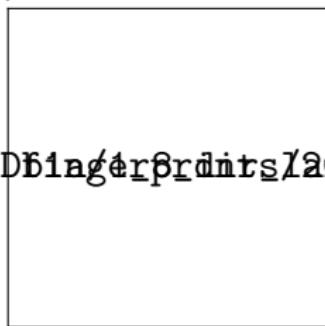
(b) Info. Direcional



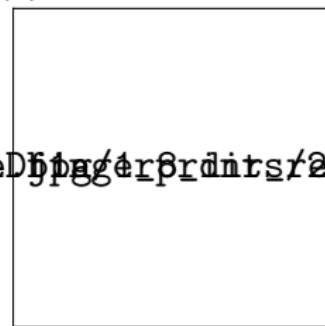
(c) Janela 15x15



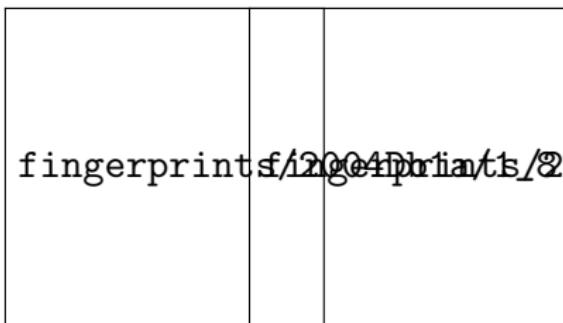
(d) Janela 45x45



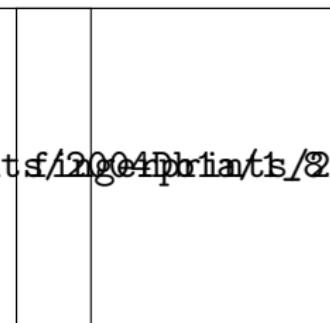
(e) Retificado



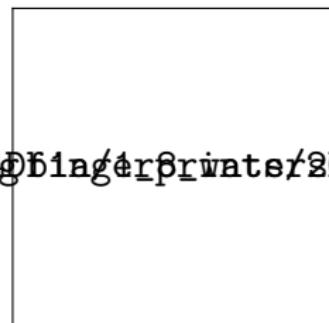
(f) Pixels retificados



(a) Original



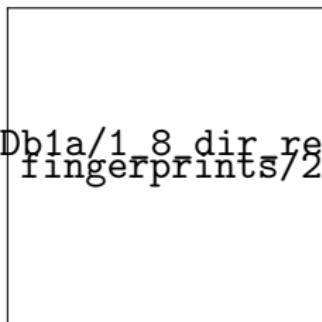
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



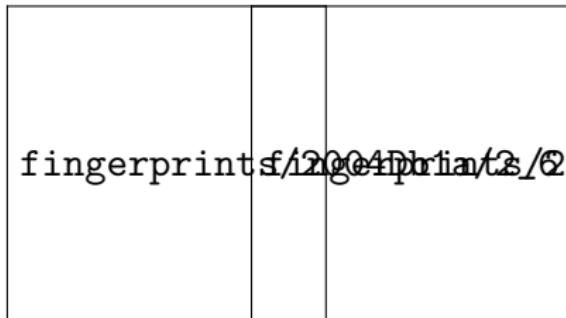
(e) Marcadores



(a) Original

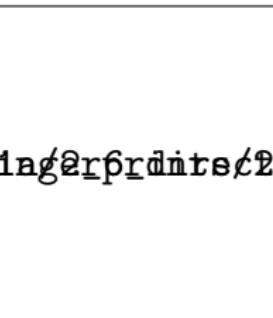


(b) Resultado final



(a) Original

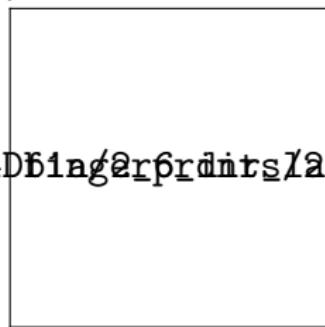
(b) Info. Direcional



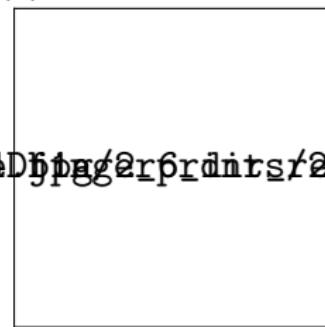
(c) Janela 15x15



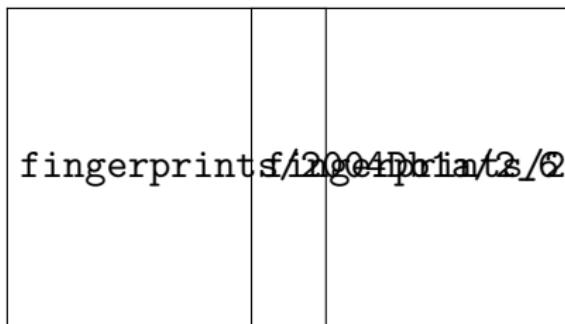
(d) Janela 45x45



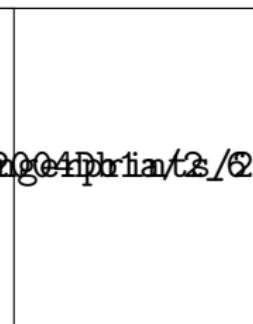
(e) Retificado



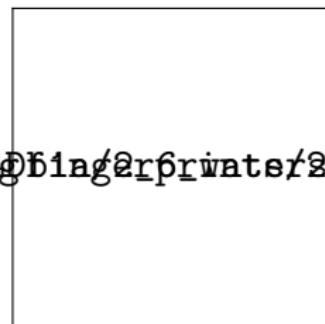
(f) Pixels retificados



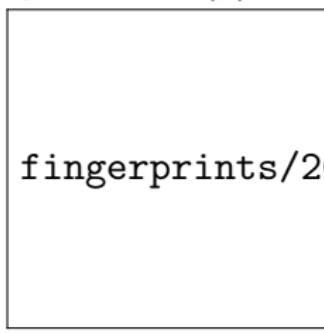
(a) Original



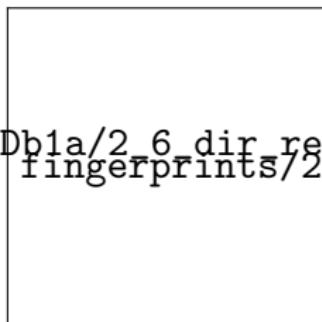
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



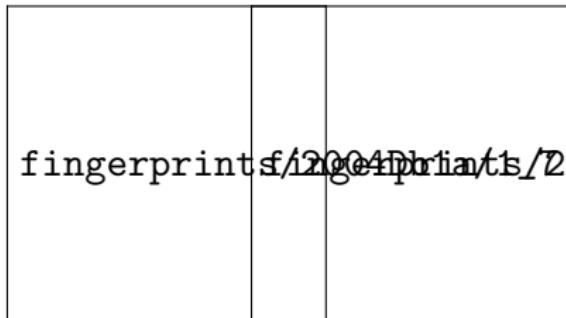
(e) Marcadores



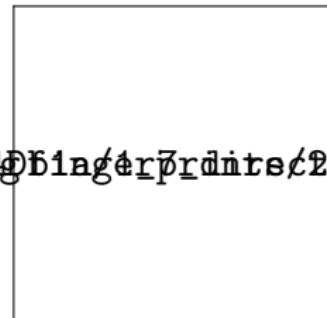
(a) Original



(b) Resultado final

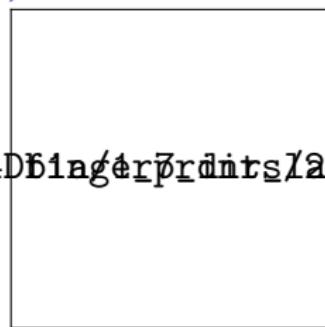
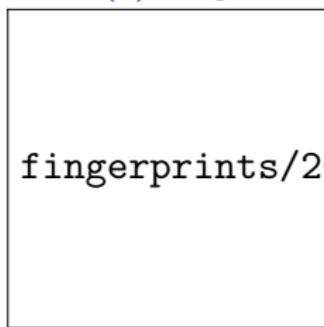


(a) Original



(b) Info. Direcional

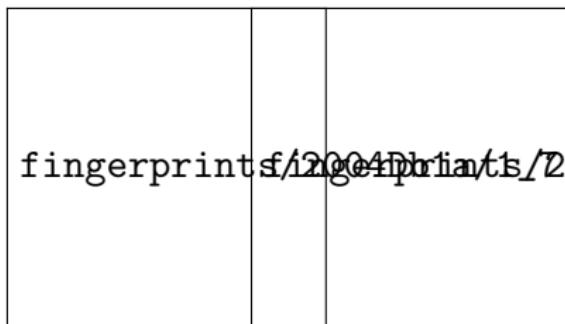
(c) Janela 15x15



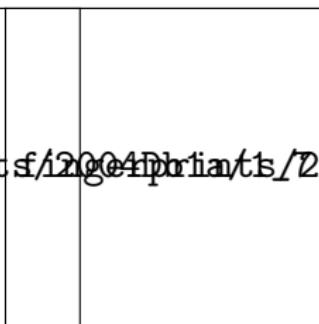
(d) Janela 45x45

(e) Retificado

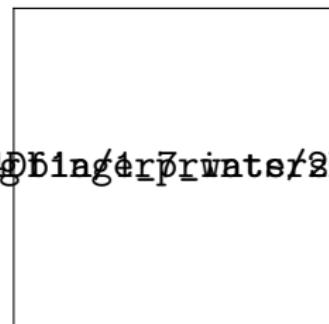
(f) Pixels retificados



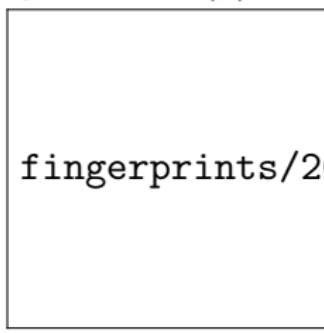
(a) Original



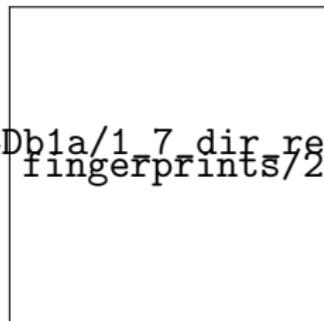
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



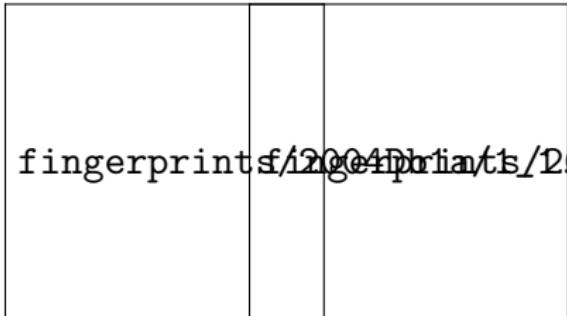
(e) Marcadores



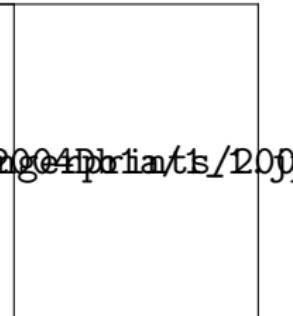
(a) Original



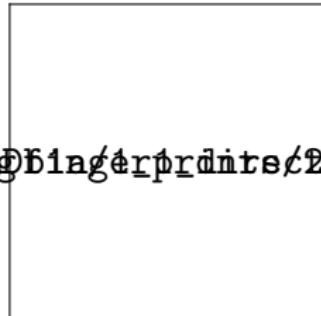
(b) Resultado final



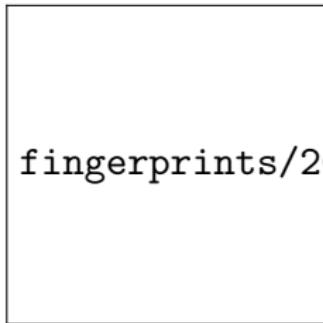
(a) Original



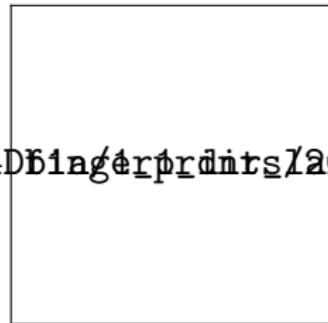
(b) Info. Direcional



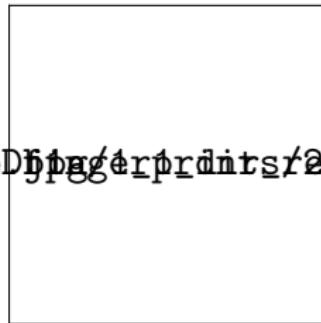
(c) Janela 15x15



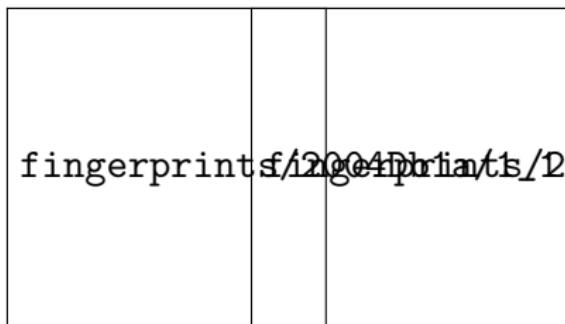
(d) Janelia 45x45



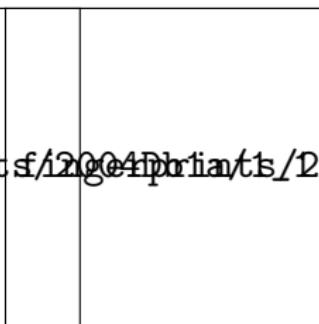
(e) Retificado



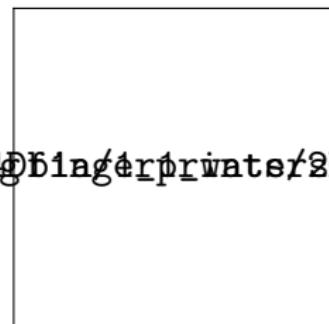
(f) Pixels retificados



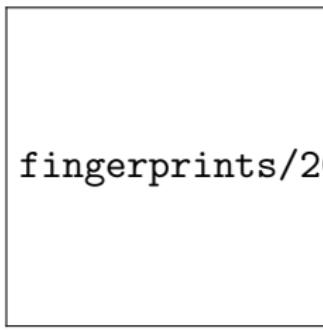
(a) Original



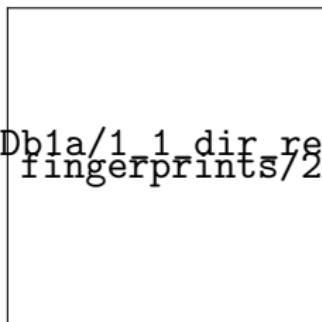
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



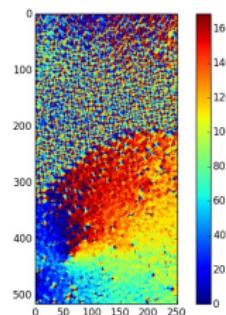
(a) Original



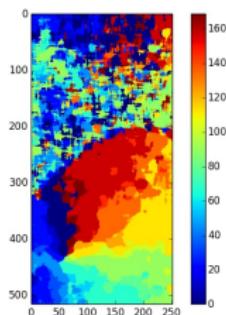
(b) Resultado final



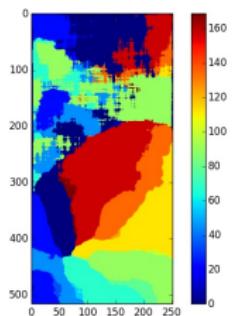
(a) Original



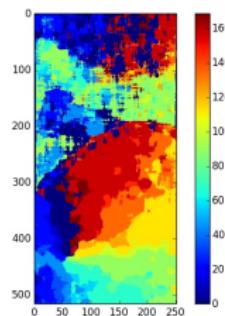
(b) Info. Direcional



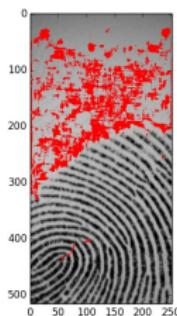
(c) Janela 15x15



(d) Janela 45x45



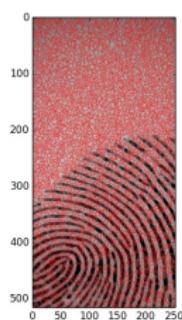
(e) Retificado



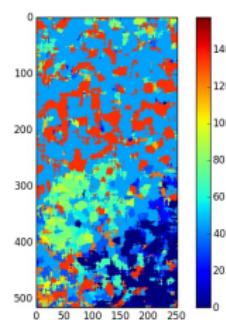
(f) Pixels retificados



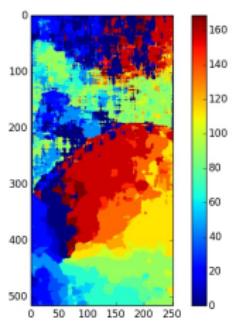
(a) Original



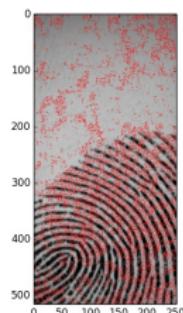
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



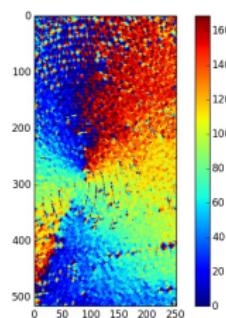
(a) Original



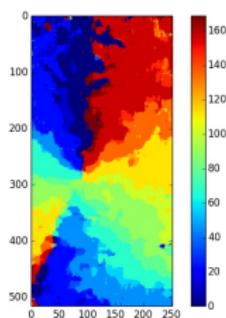
(b) Resultado final



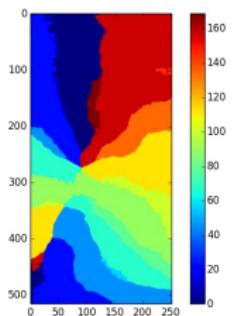
(a) Original



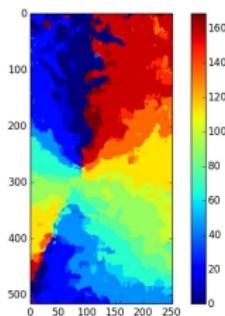
(b) Info. Direcional



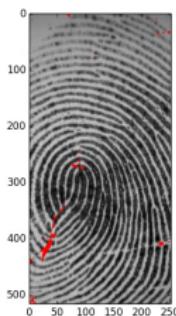
(c) Janela 15x15



(d) Janela 45x45



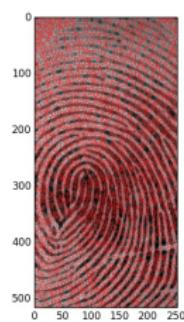
(e) Retificado



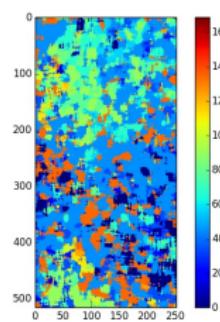
(f) Pixels retificados



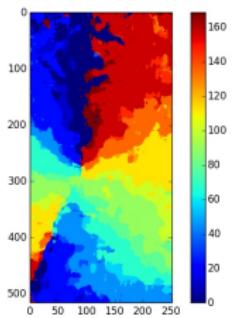
(a) Original



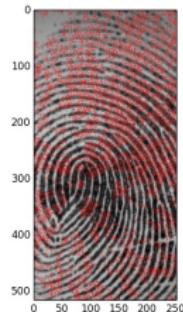
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



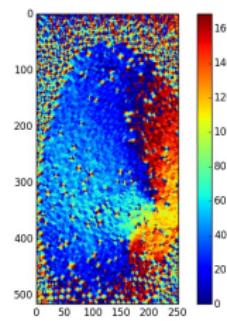
(a) Original



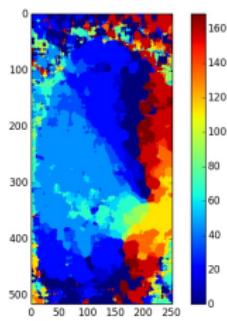
(b) Resultado final



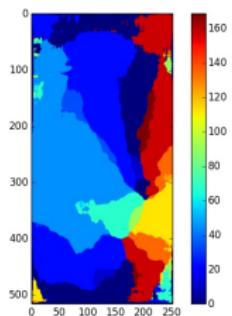
(a) Original



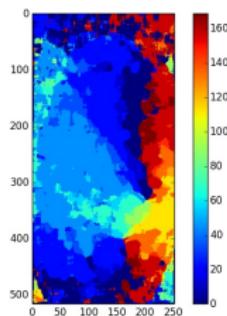
(b) Info. Direcional



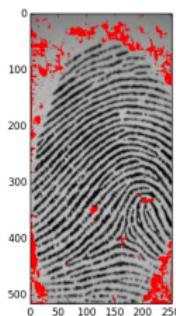
(c) Janela 15x15



(d) Janela 45x45



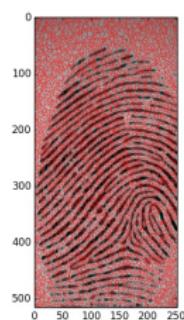
(e) Retificado



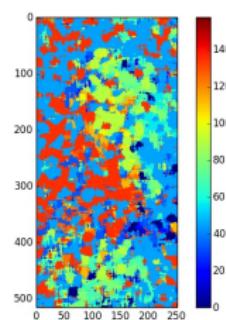
(f) Pixels retificados



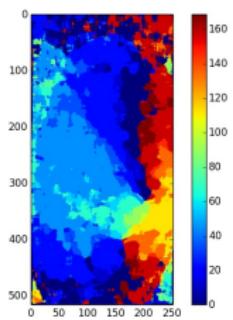
(a) Original



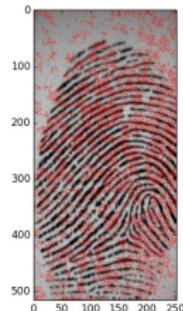
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



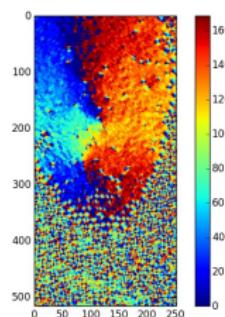
(e) Marcadores



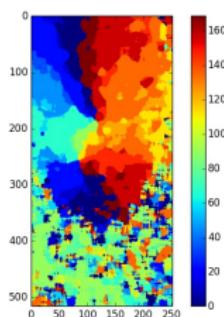
(a) Original



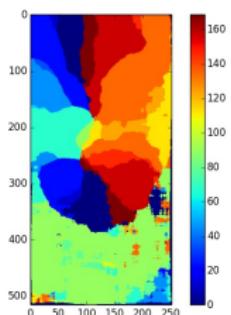
(b) Resultado final



(a) Original

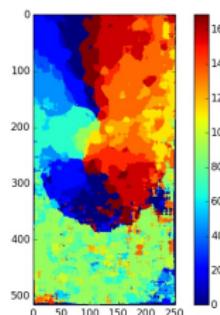


(c) Janela 15x15

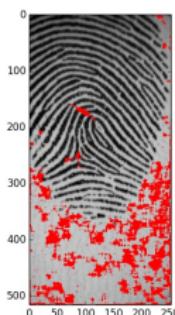


(d) Janela 45x45

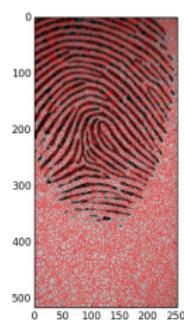
(b) Info. Direcional



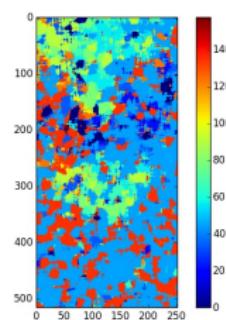
(e) Retificado



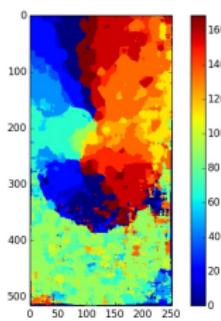
(f) Pixels retificados



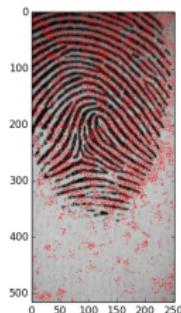
(a) Original



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



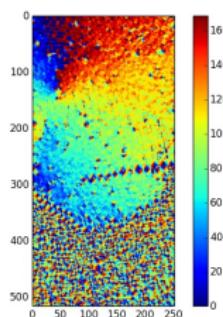
(e) Marcadores



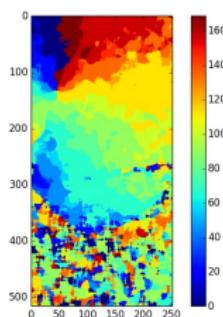
(a) Original



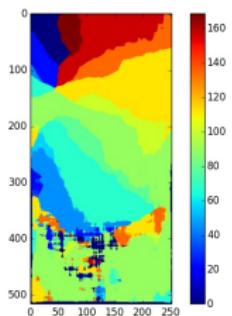
(b) Resultado final



(a) Original

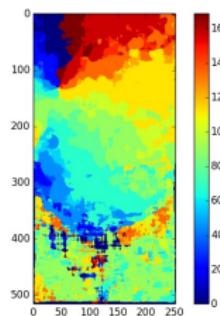


(c) Janela 15x15

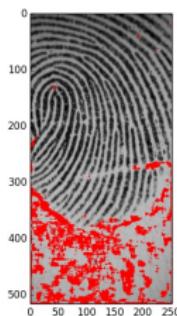


(d) Janela 45x45

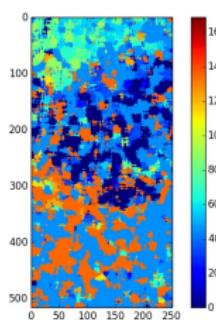
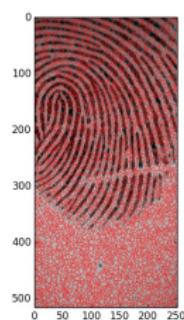
(b) Info. Direcional



(e) Retificado



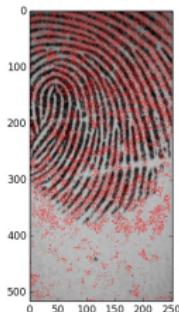
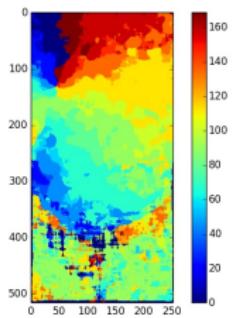
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

(e) Marcadores



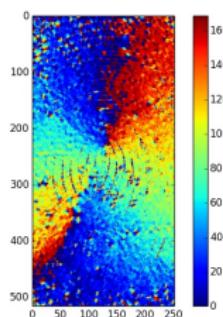
(a) Original



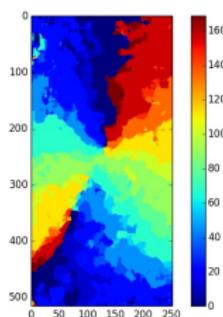
(b) Resultado final



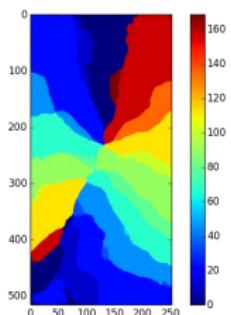
(a) Original



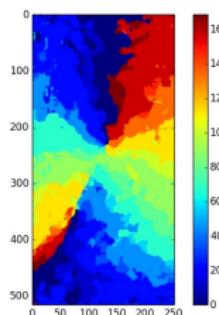
(b) Info. Direcional



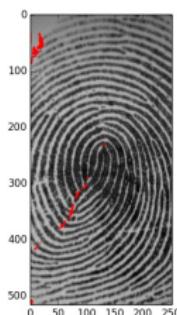
(c) Janela 15x15



(d) Janela 45x45



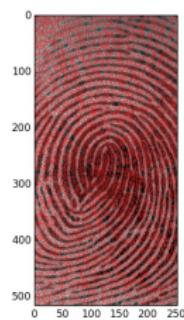
(e) Retificado



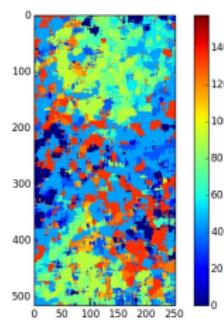
(f) Pixels retificados



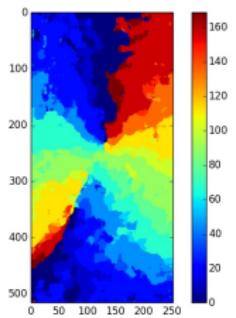
(a) Original



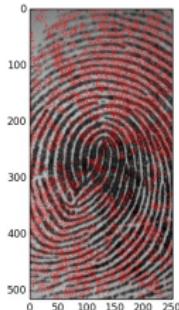
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



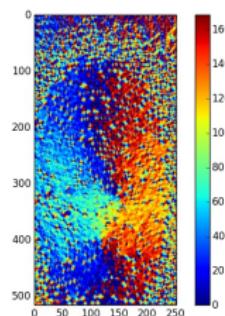
(e) Marcadores



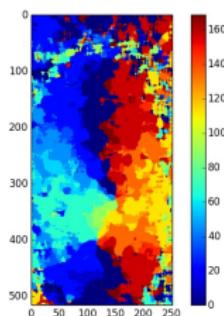
(a) Original



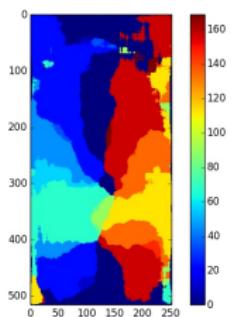
(b) Resultado final



(a) Original

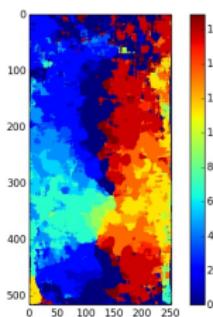


(c) Janela 15x15

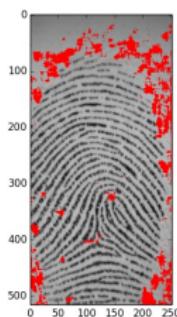


(d) Janela 45x45

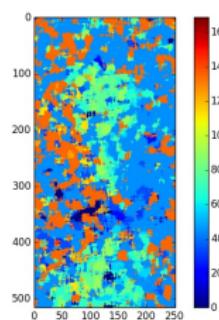
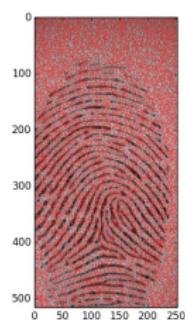
(b) Info. Direcional



(e) Retificado



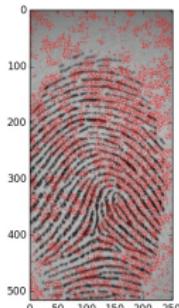
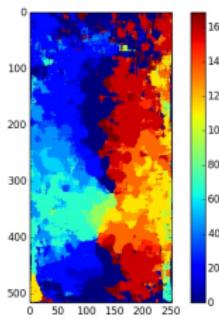
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

(e) Marcadores



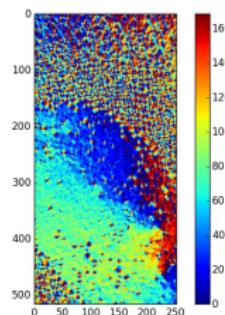
(a) Original



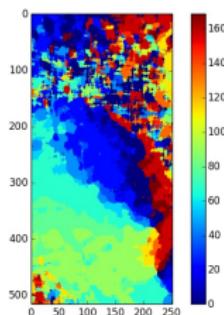
(b) Resultado final



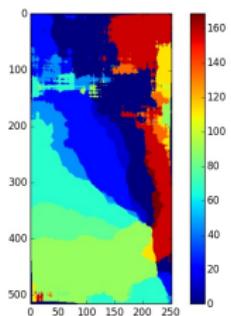
(a) Original



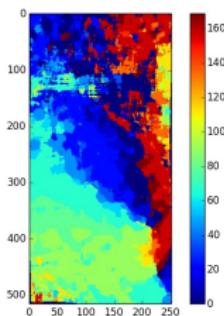
(b) Info. Direcional



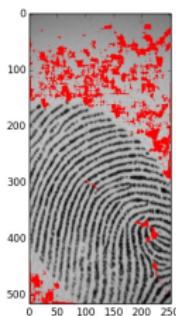
(c) Janela 15x15



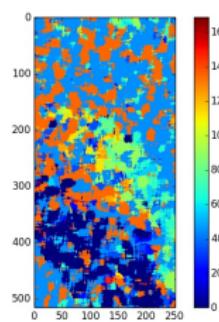
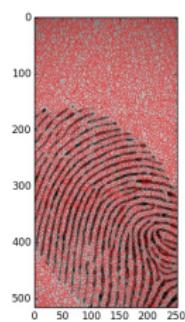
(d) Janela 45x45



(e) Retificado



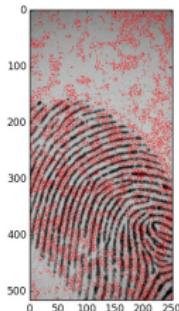
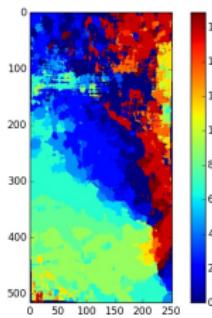
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

(e) Marcadores



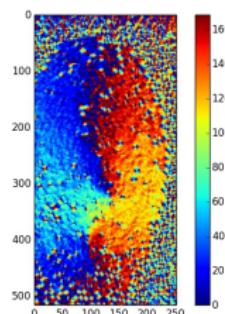
(a) Original



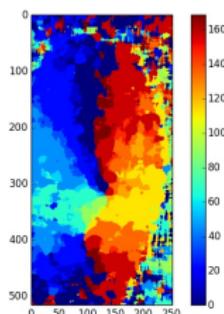
(b) Resultado final



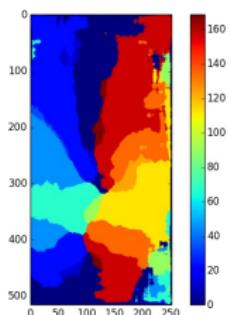
(a) Original



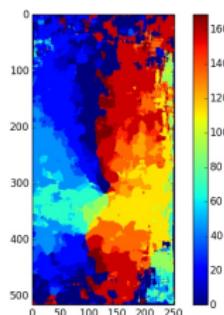
(b) Info. Direcional



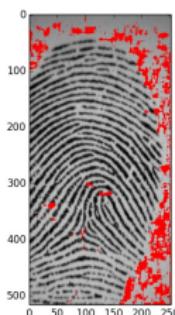
(c) Janela 15x15



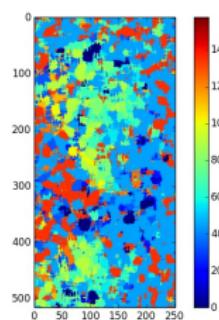
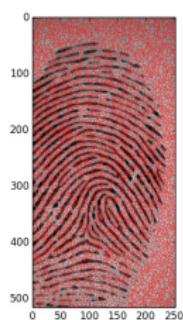
(d) Janela 45x45



(e) Retificado



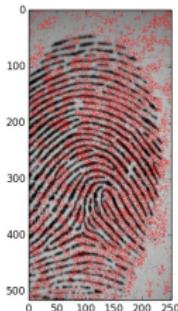
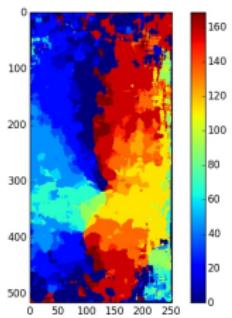
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

(e) Marcadores



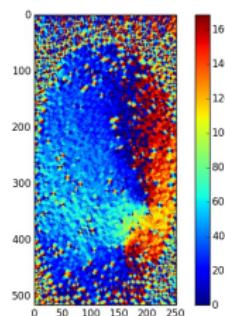
(a) Original



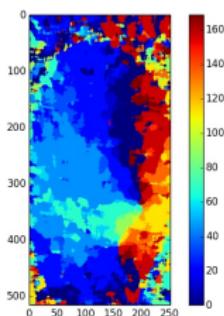
(b) Resultado final



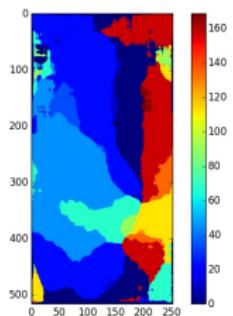
(a) Original



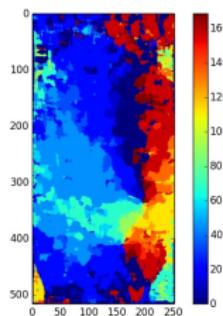
(b) Info. Direcional



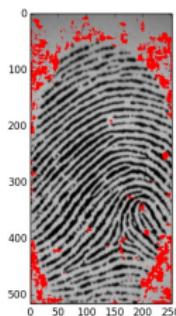
(c) Janela 15x15



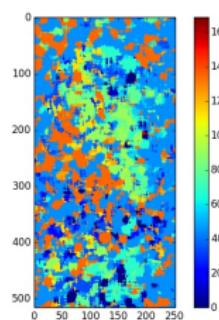
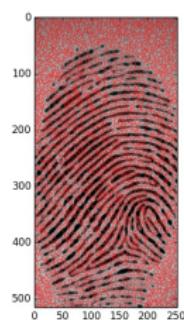
(d) Janela 45x45



(e) Retificado



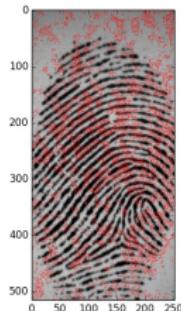
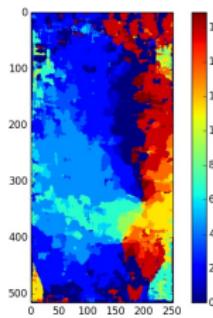
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

(e) Marcadores



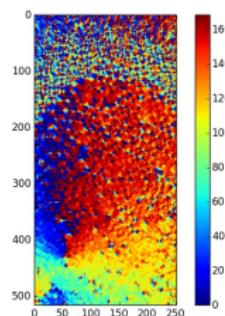
(a) Original



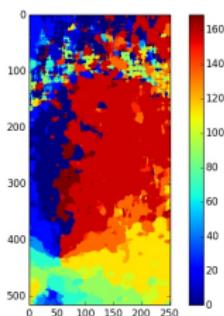
(b) Resultado final



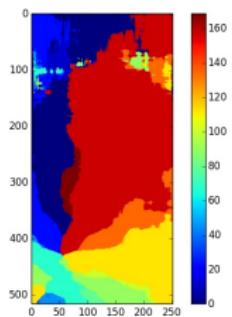
(a) Original



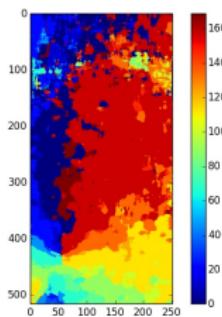
(b) Info. Direcional



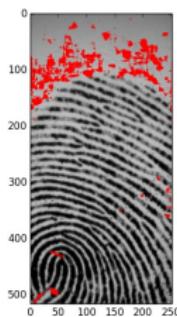
(c) Janela 15x15



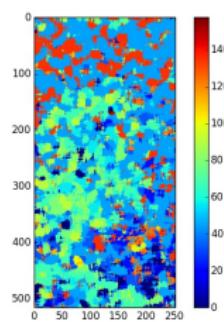
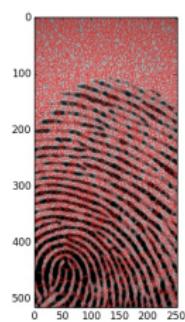
(d) Janela 45x45



(e) Retificado



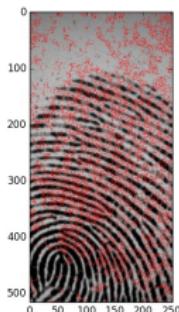
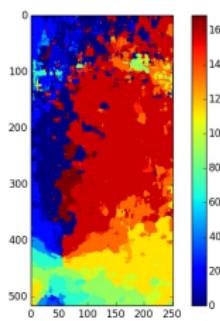
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

(e) Marcadores



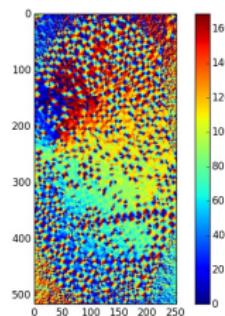
(a) Original



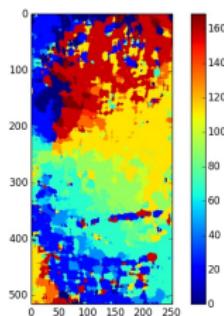
(b) Resultado final



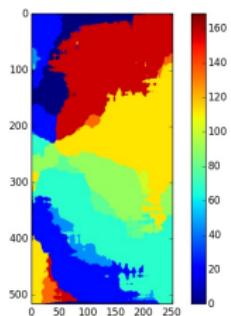
(a) Original



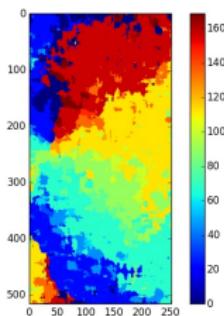
(b) Info. Direcional



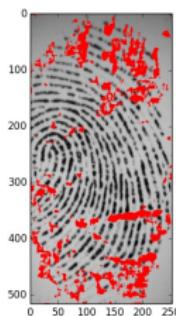
(c) Janela 15x15



(d) Janela 45x45



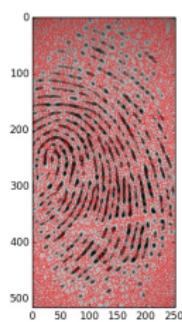
(e) Retificado



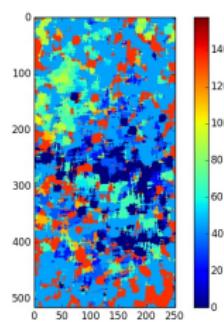
(f) Pixels retificados



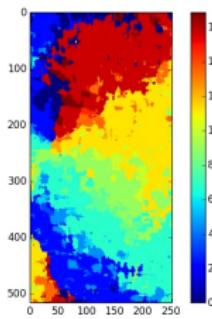
(a) Original



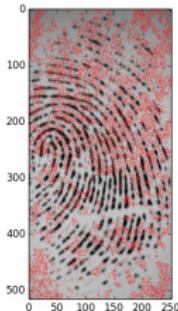
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



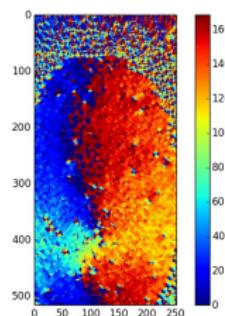
(a) Original



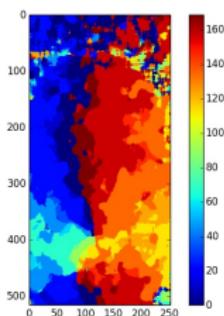
(b) Resultado final



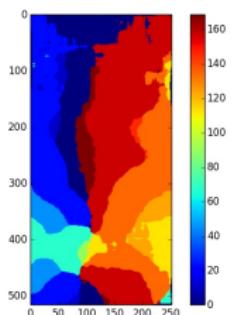
(a) Original



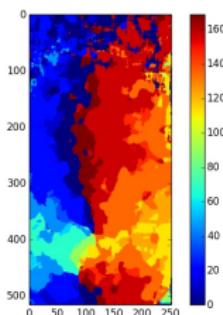
(b) Info. Direcional



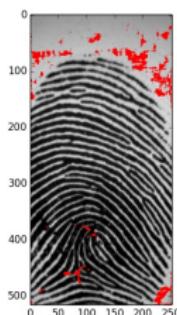
(c) Janela 15x15



(d) Janela 45x45



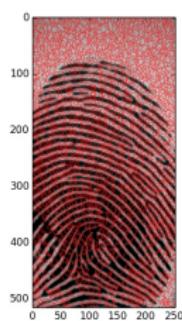
(e) Retificado



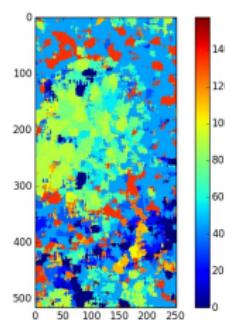
(f) Pixels retificados



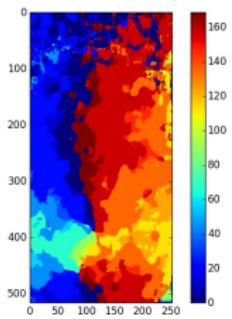
(a) Original



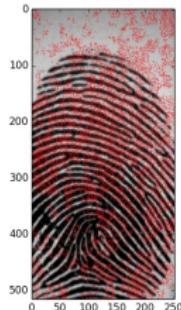
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



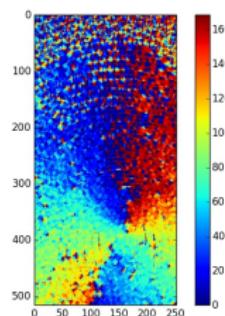
(a) Original



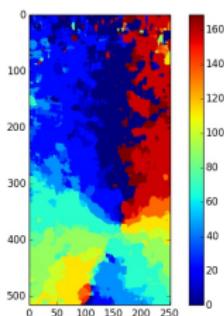
(b) Resultado final



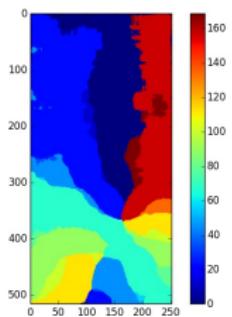
(a) Original



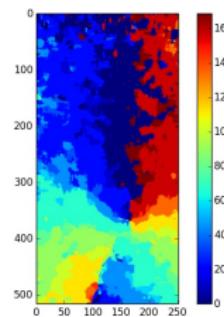
(b) Info. Direcional



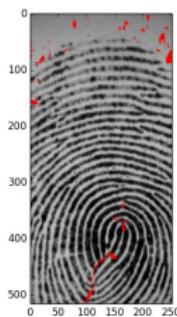
(c) Janela 15x15



(d) Janela 45x45



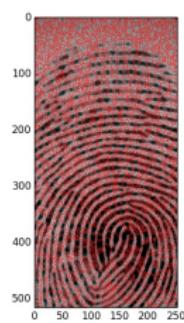
(e) Retificado



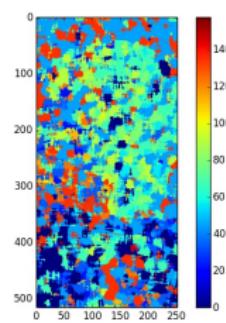
(f) Pixels retificados



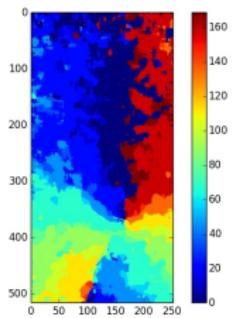
(a) Original



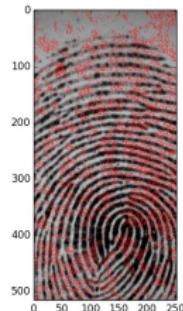
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



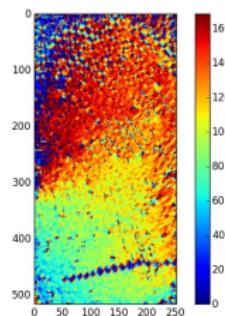
(a) Original



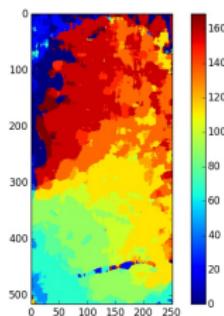
(b) Resultado final



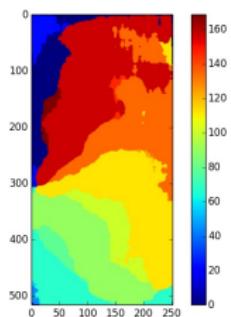
(a) Original



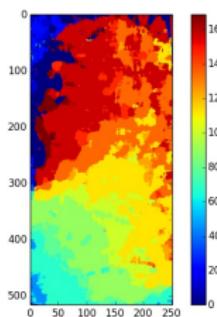
(b) Info. Direcional



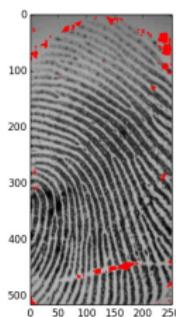
(c) Janela 15x15



(d) Janela 45x45



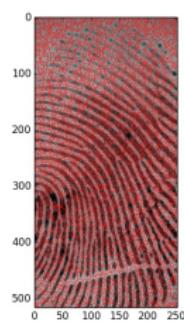
(e) Retificado



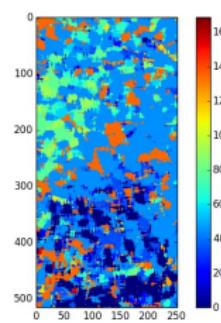
(f) Pixels retificados



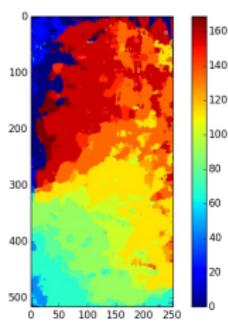
(a) Original



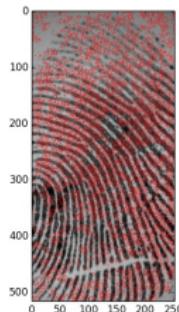
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



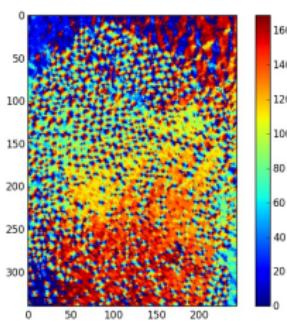
(a) Original



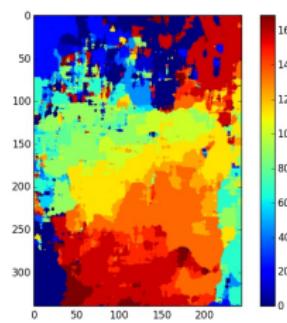
(b) Resultado final



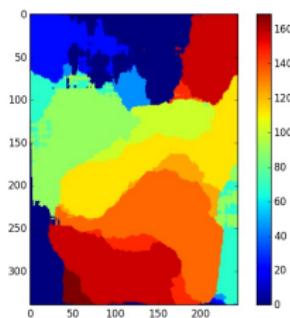
(a) Original



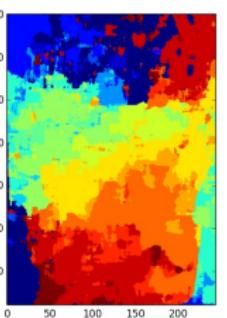
(b) Info. Direcional



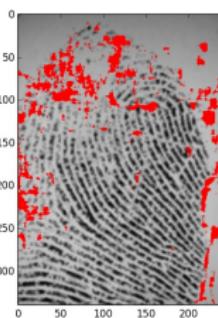
(c) Janela 15x15



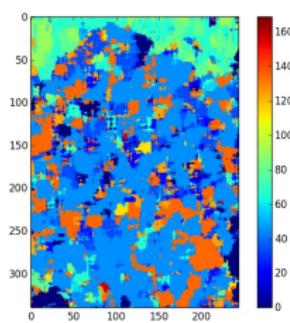
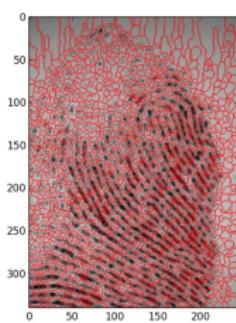
(d) Janela 45x45



(e) Retificado



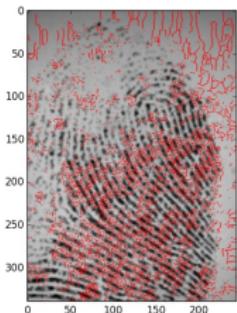
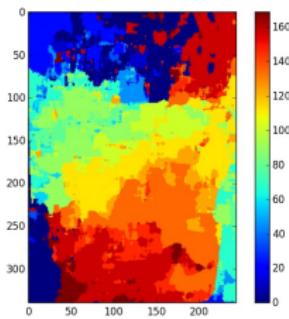
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

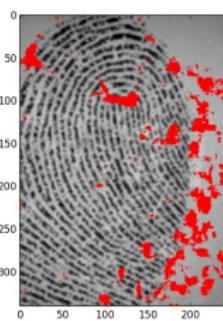
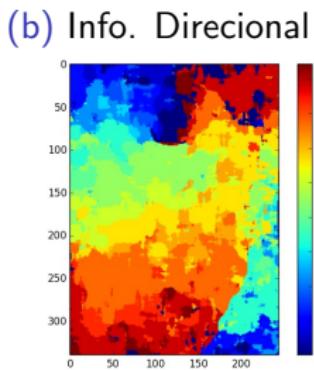
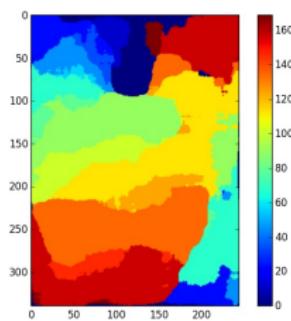
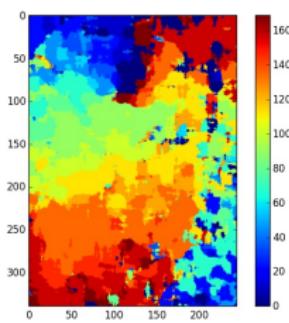
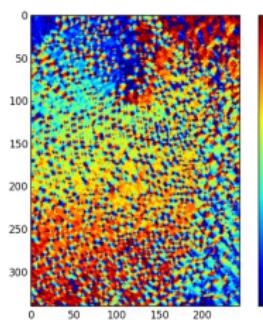
(e) Marcadores



(a) Original

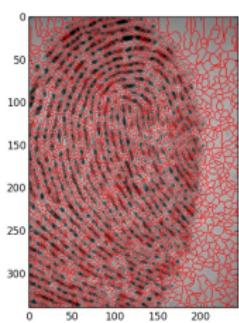


(b) Resultado final

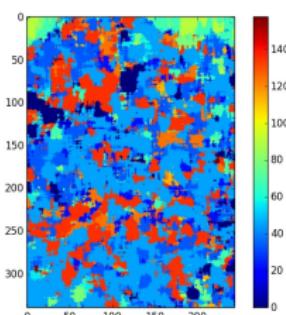




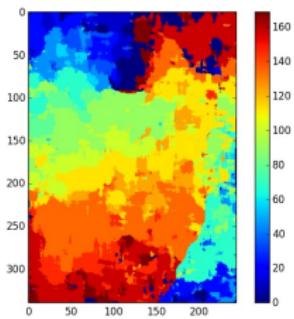
(a) Original



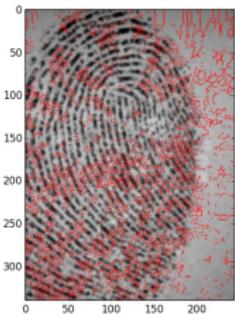
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



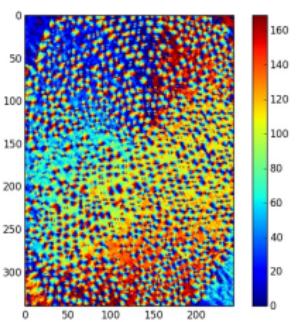
(a) Original



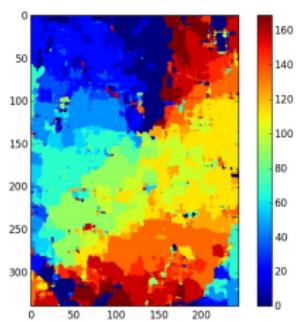
(b) Resultado final



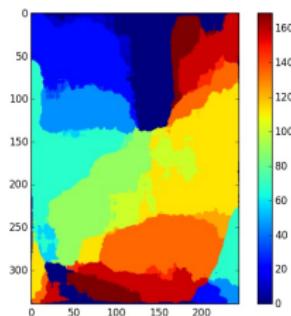
(a) Original



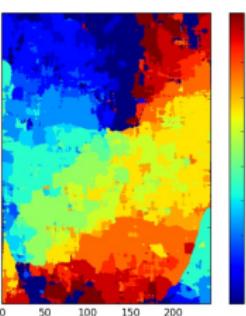
(b) Info. Direcional



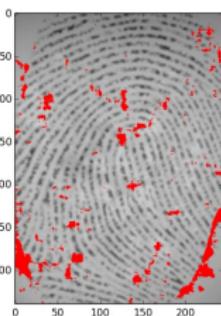
(c) Janela 15x15



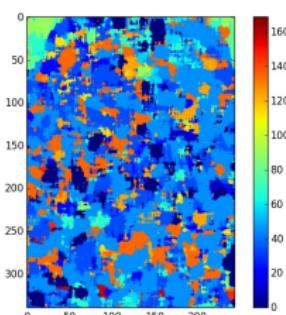
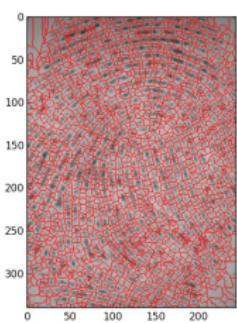
(d) Janela 45x45



(e) Retificado



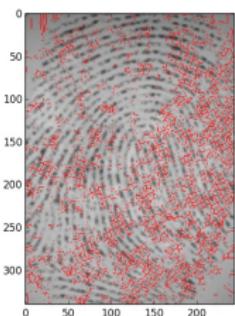
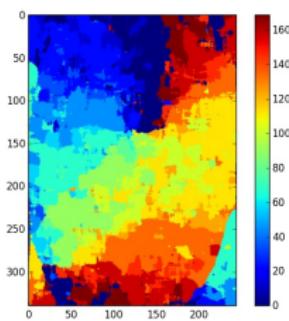
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)

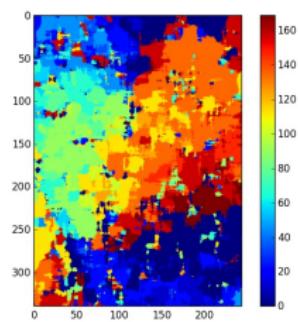
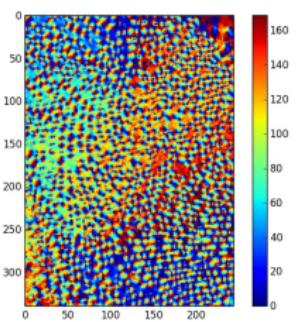
(e) Marcadores



(a) Original



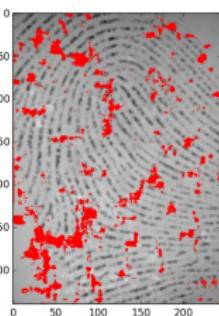
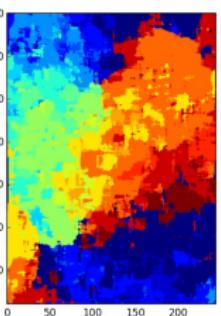
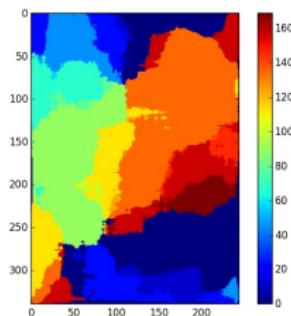
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



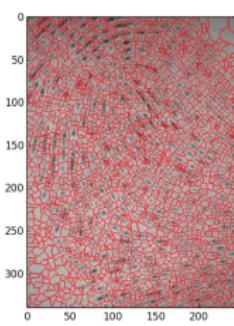
(d) Janela 45x45

(e) Retificado

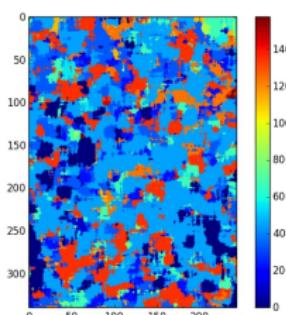
(f) Pixels retificados



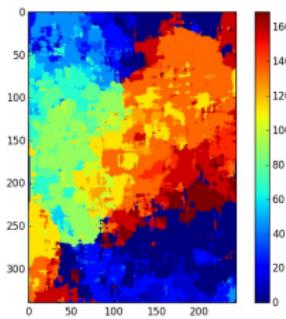
(a) Original



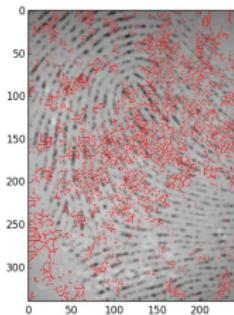
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



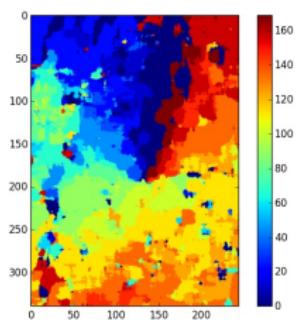
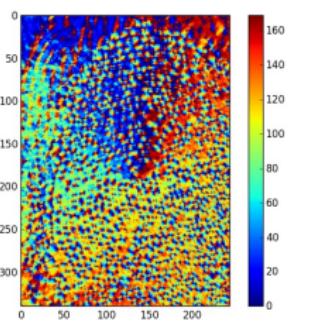
(e) Marcadores



(a) Original



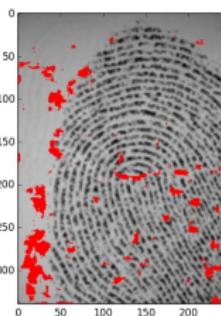
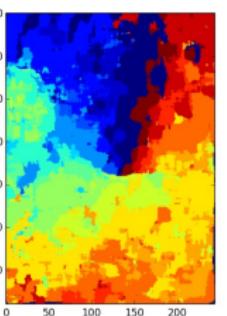
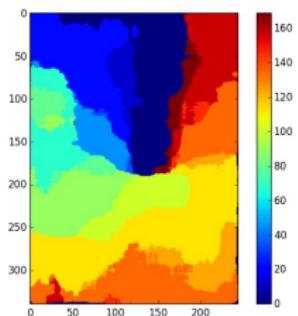
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



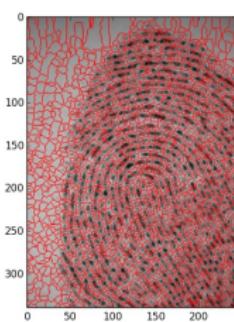
(d) Janela 45x45

(e) Retificado

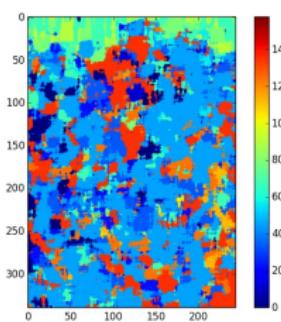
(f) Pixels retificados



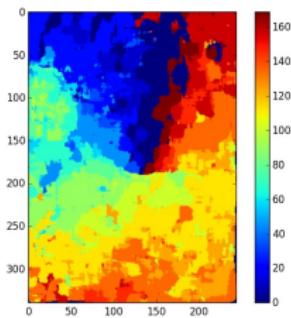
(a) Original



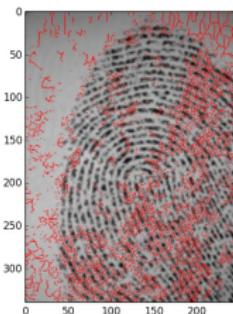
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



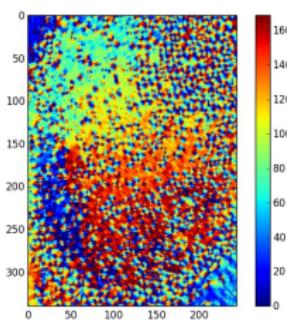
(a) Original



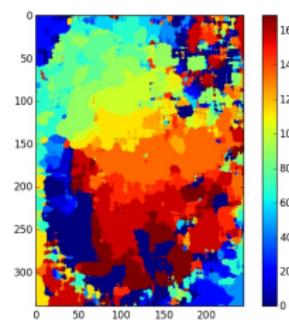
(b) Resultado final



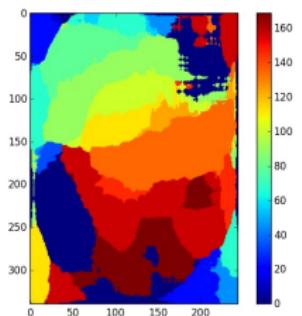
(a) Original



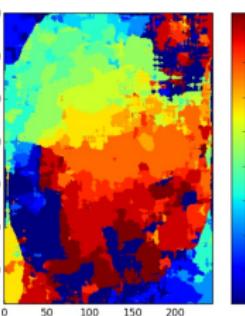
(b) Info. Direcional



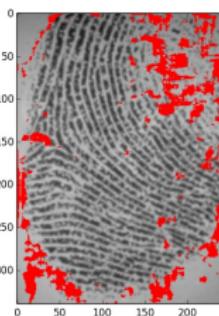
(c) Janela 15x15



(d) Janela 45x45



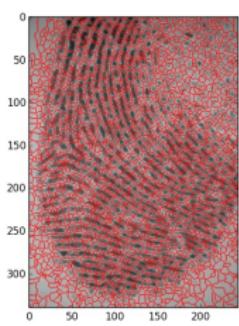
(e) Retificado



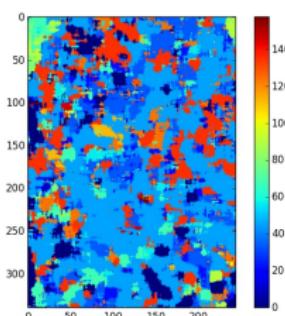
(f) Pixels retificados



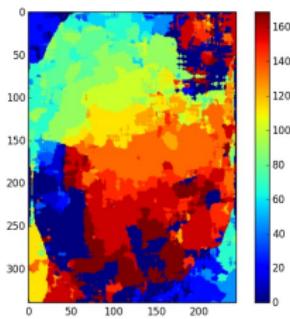
(a) Original



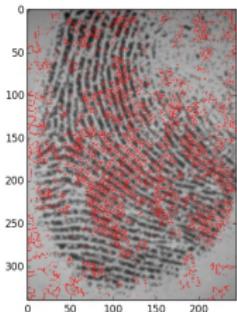
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



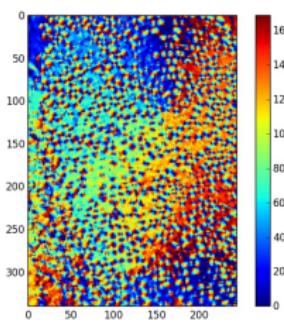
(a) Original



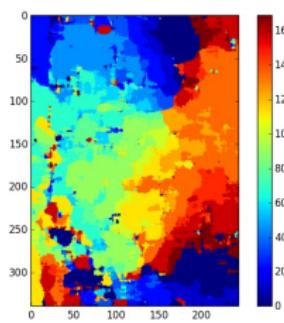
(b) Resultado final



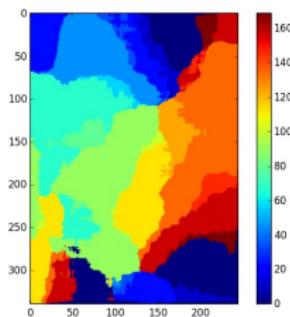
(a) Original



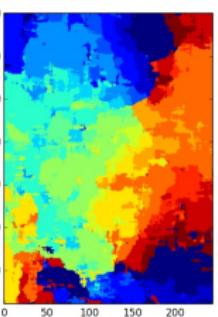
(b) Info. Direcional



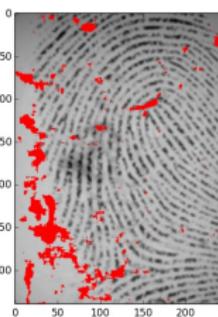
(c) Janela 15x15



(d) Janela 45x45



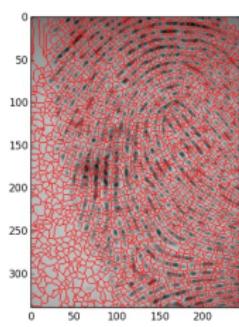
(e) Retificado



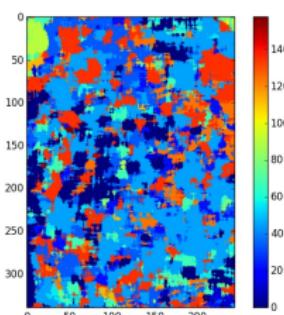
(f) Pixels retificados



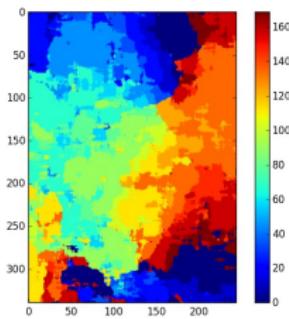
(a) Original



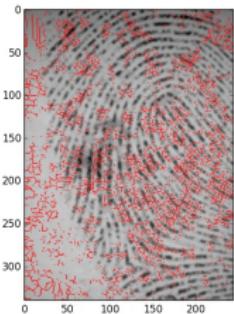
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



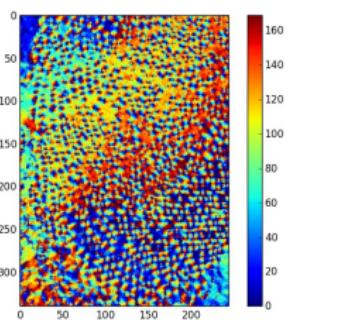
(a) Original



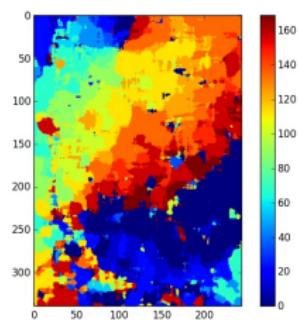
(b) Resultado final



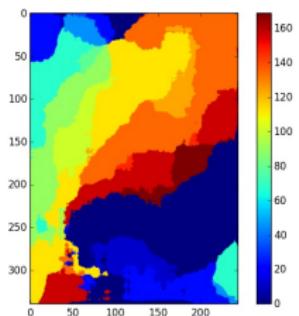
(a) Original



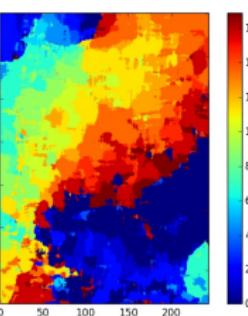
(b) Info. Direcional



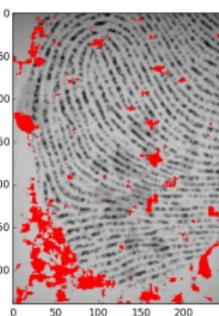
(c) Janela 15x15



(d) Janela 45x45



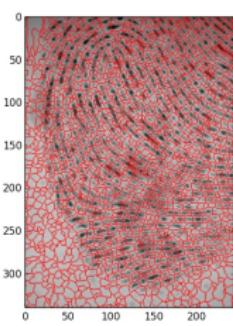
(e) Retificado



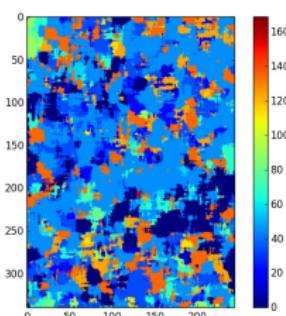
(f) Pixels retificados



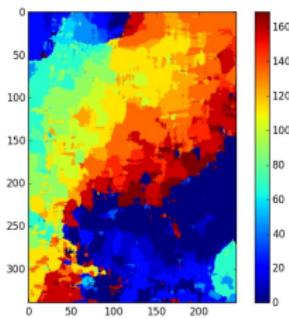
(a) Original



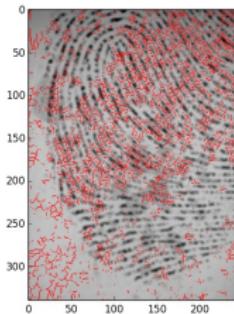
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



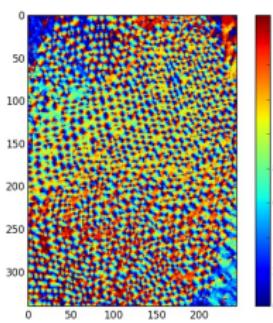
(a) Original



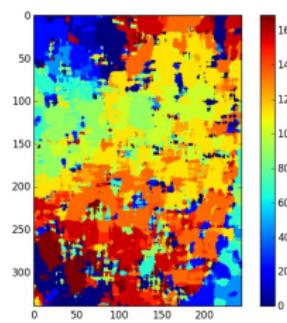
(b) Resultado final



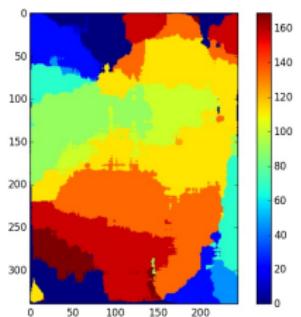
(a) Original



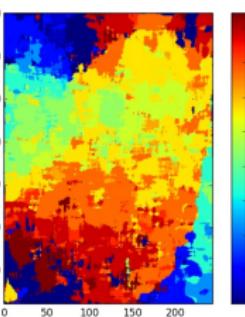
(b) Info. Direcional



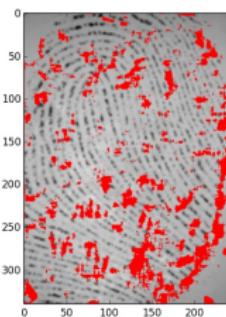
(c) Janela 15x15



(d) Janela 45x45



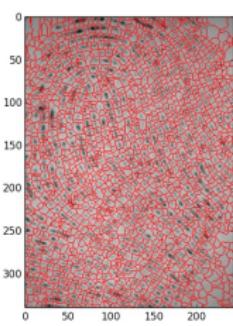
(e) Retificado



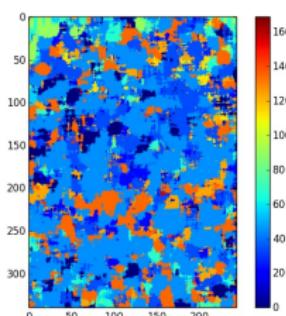
(f) Pixels retificados



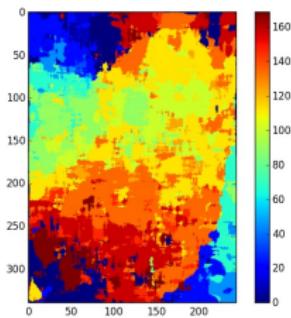
(a) Original



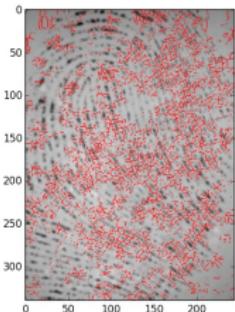
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



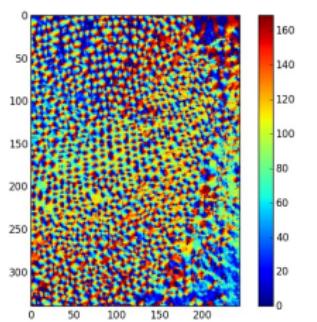
(a) Original



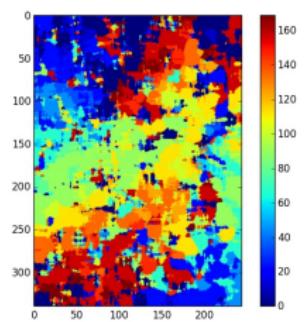
(b) Resultado final



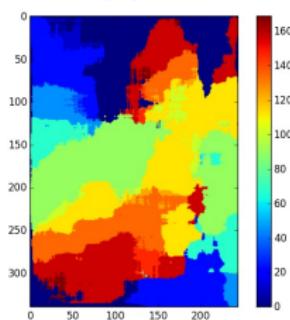
(a) Original



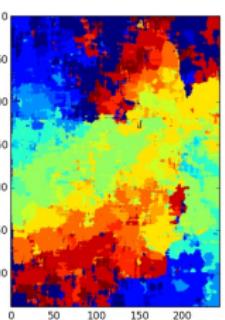
(b) Info. Direcional



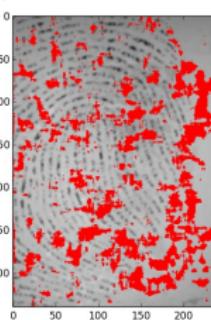
(c) Janela 15x15



(d) Janela 45x45



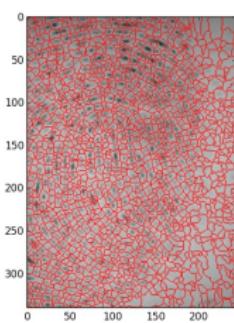
(e) Retificado



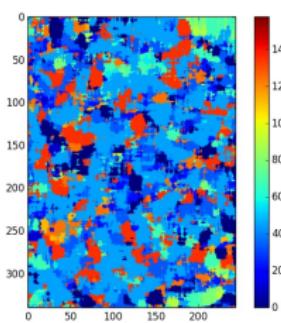
(f) Pixels retificados



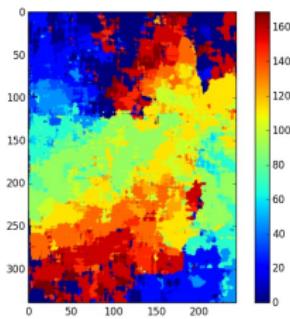
(a) Original



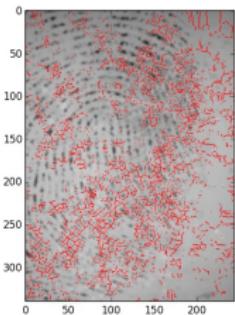
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



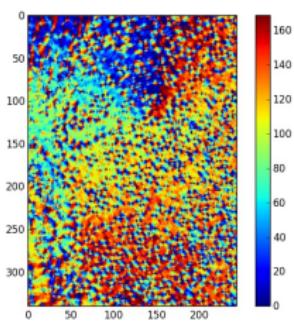
(a) Original



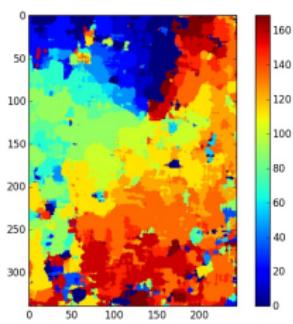
(b) Resultado final



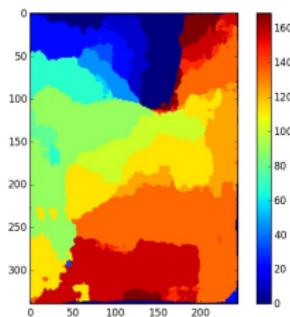
(a) Original



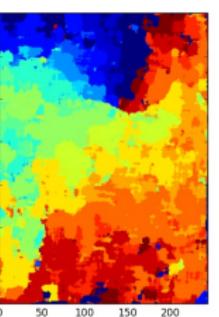
(b) Info. Direcional



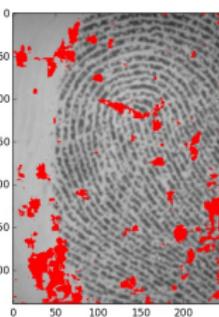
(c) Janela 15x15



(d) Janela 45x45



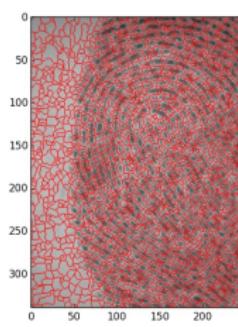
(e) Retificado



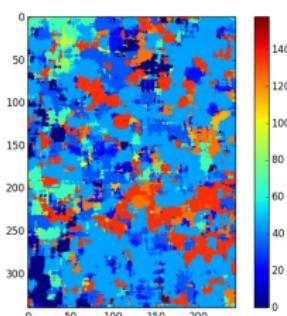
(f) Pixels retificados



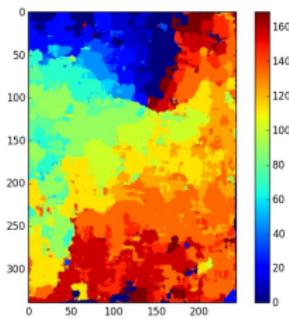
(a) Original



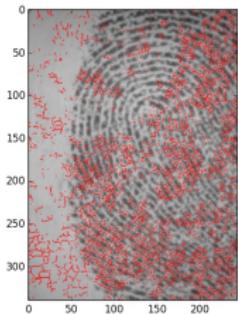
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



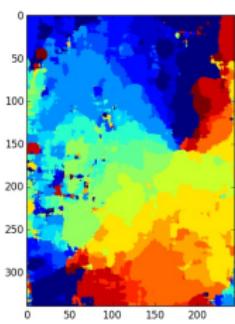
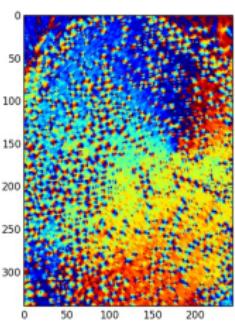
(e) Marcadores



(a) Original



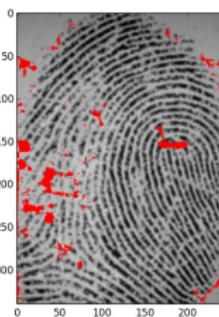
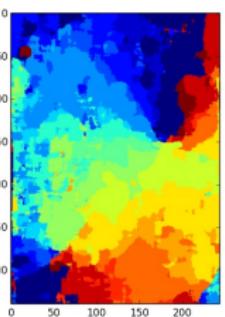
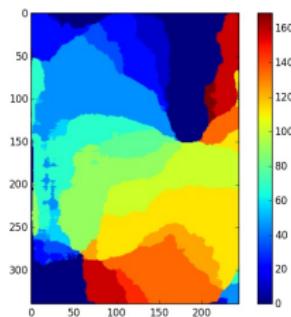
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



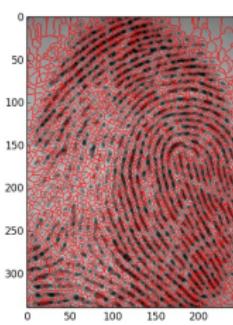
(d) Janela 45x45

(e) Retificado

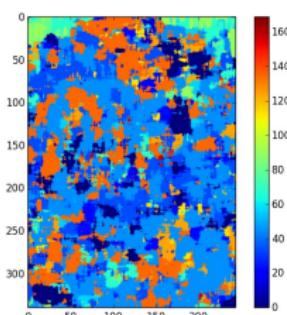
(f) Pixels retificados



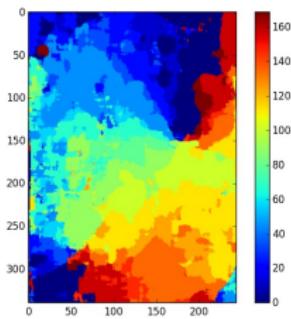
(a) Original



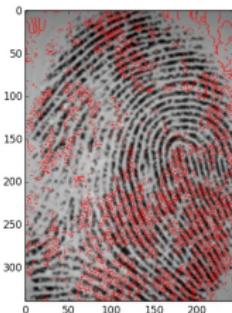
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



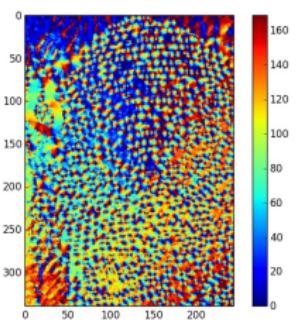
(a) Original



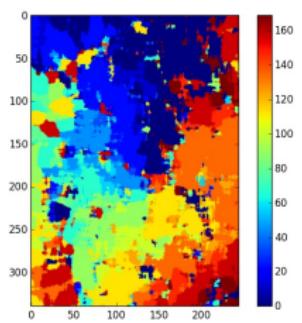
(b) Resultado final



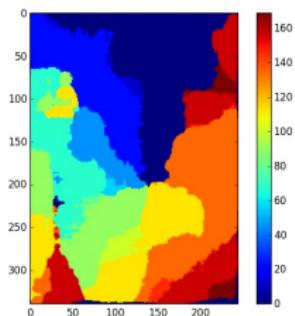
(a) Original



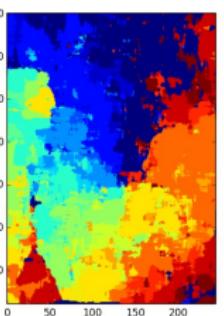
(b) Info. Direcional



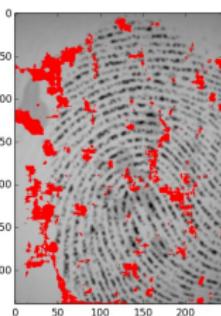
(c) Janela 15x15



(d) Janela 45x45



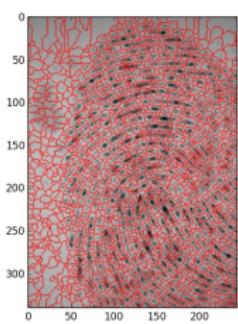
(e) Retificado



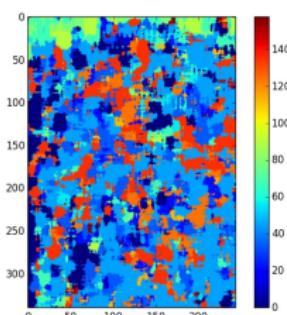
(f) Pixels retificados



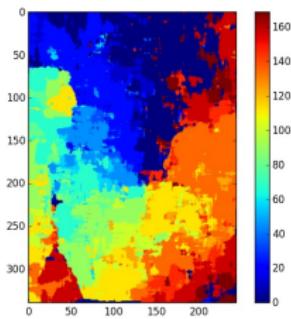
(a) Original



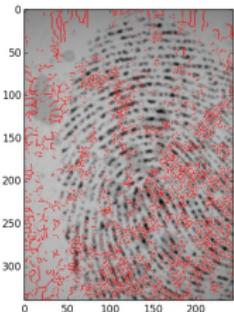
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



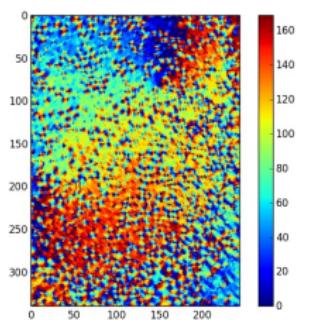
(a) Original



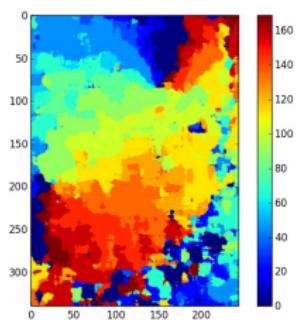
(b) Resultado final



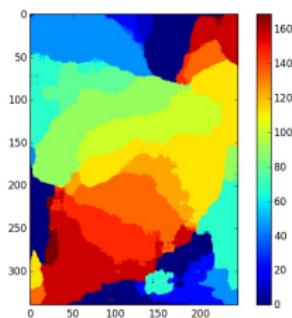
(a) Original



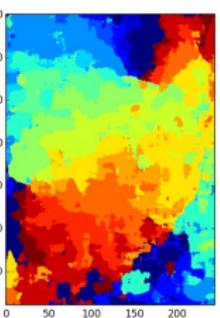
(b) Info. Direcional



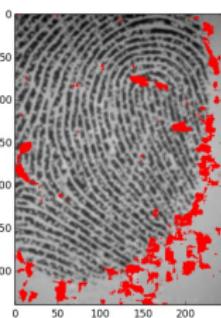
(c) Janela 15x15



(d) Janela 45x45



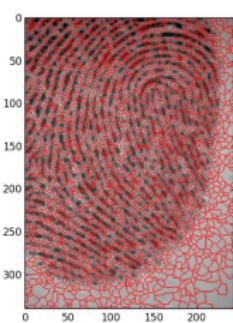
(e) Retificado



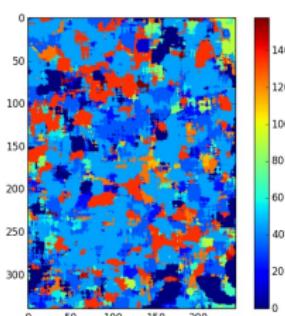
(f) Pixels retificados



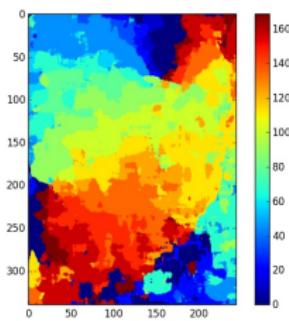
(a) Original



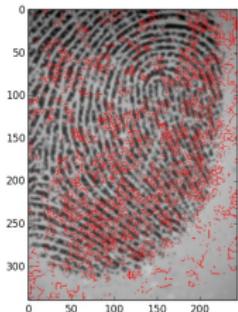
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



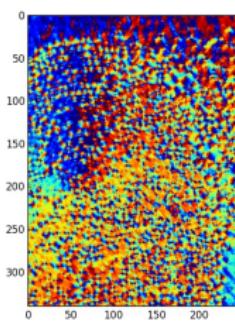
(a) Original



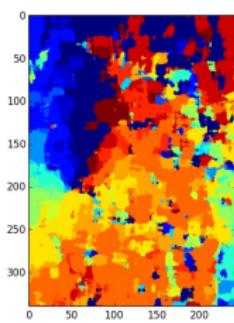
(b) Resultado final



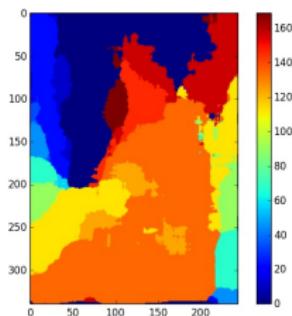
(a) Original



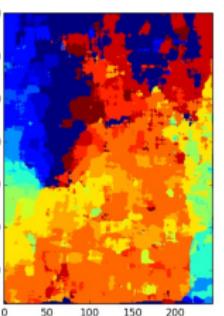
(b) Info. Direcional



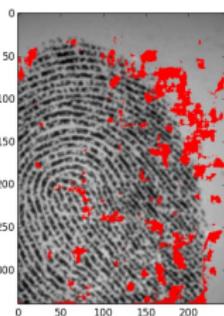
(c) Janela 15x15



(d) Janela 45x45



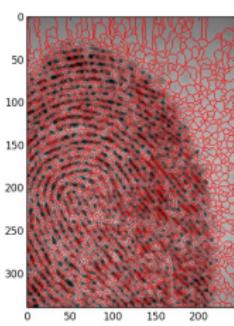
(e) Retificado



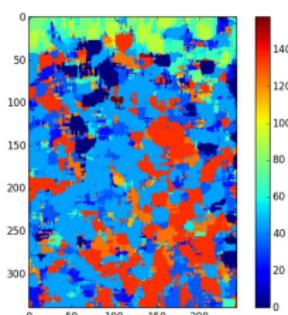
(f) Pixels retificados



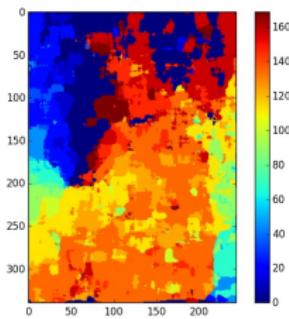
(a) Original



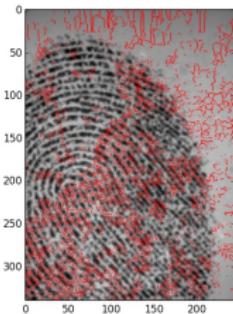
(b) Watershed



(c) Direção watershed



(d) Info. Direcional
retificada (fig. original)



(e) Marcadores



(a) Original



(b) Resultado final