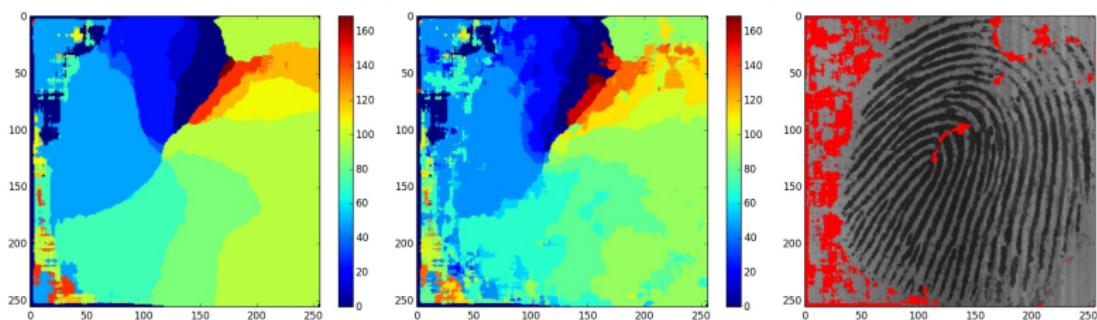
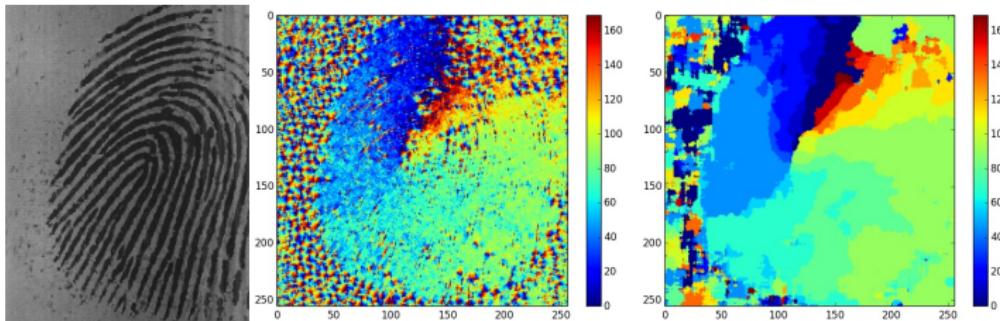


MC920: Introdução ao Processamento de Imagem Digital

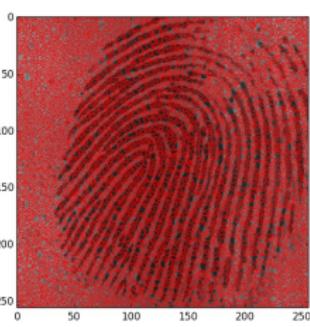
Martin de Oliveira (118077) Rafael Hermano (121286)

24 de junho de 2014

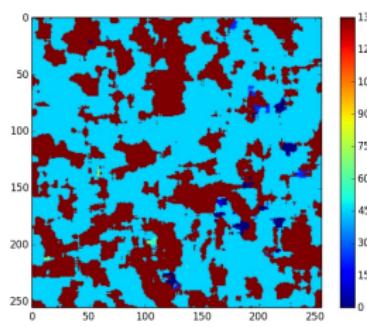




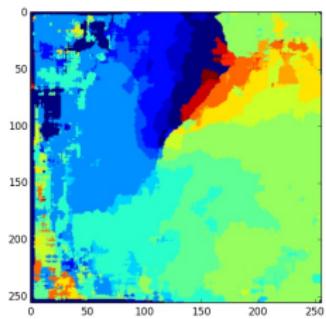
(a) Original



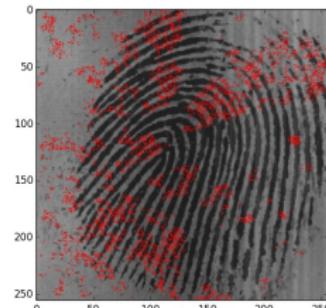
(b) Watershed



(c) Direção watershed



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



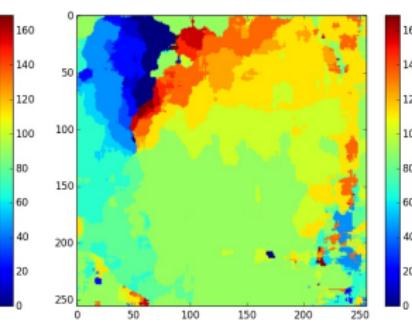
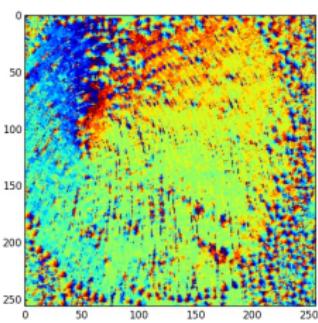
(e) Marcadores



(a) Original



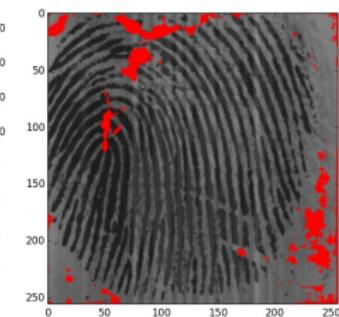
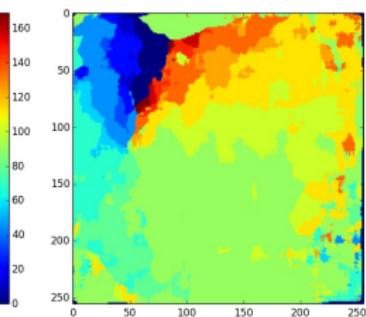
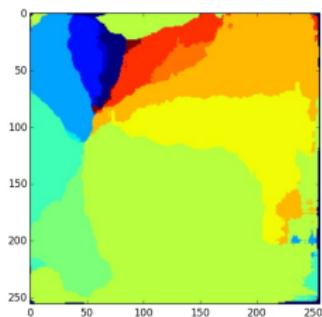
(b) Resultado final



(a) Original

(b) Info. Direcional

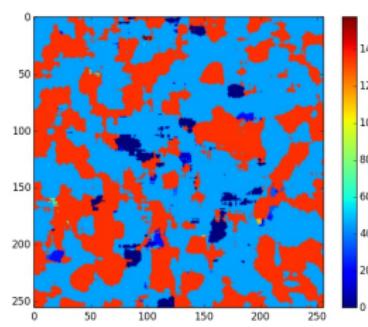
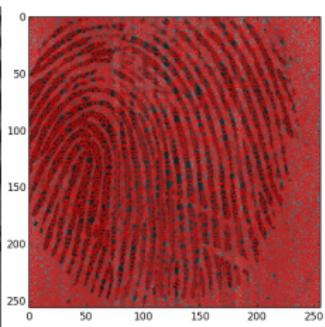
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

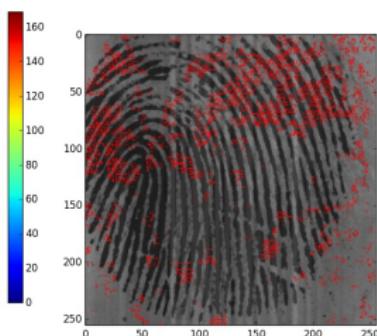
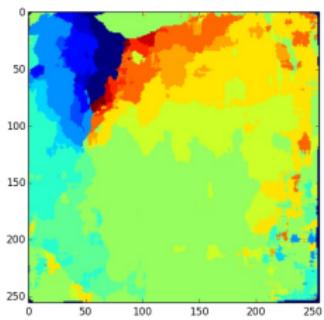
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



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

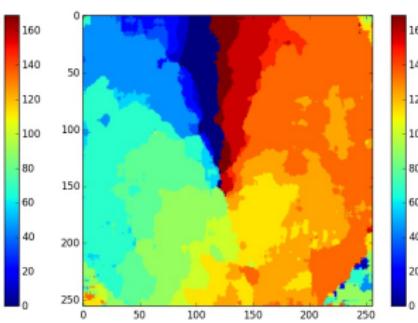
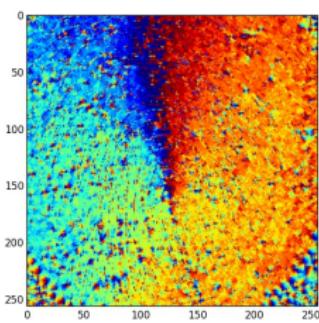
(e) Marcadores



(a) Original



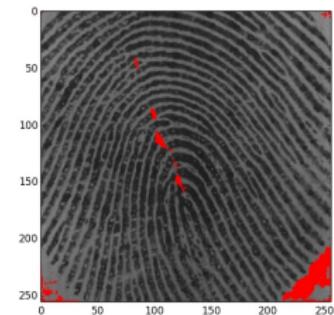
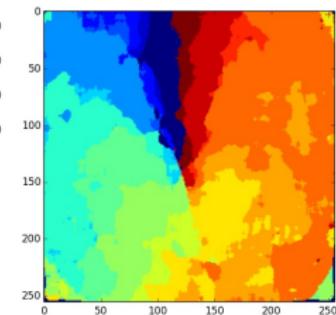
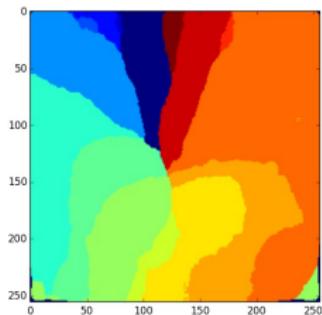
(b) Resultado final



(a) Original

(b) Info. Direcional

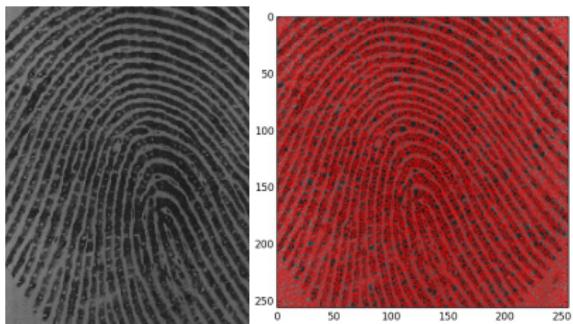
(c) Janela 15x15



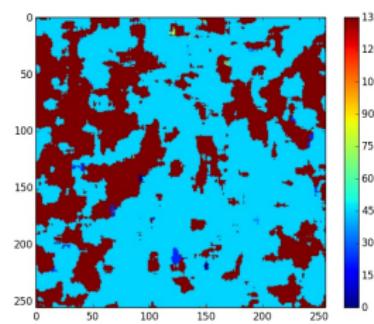
(d) Janela 45x45

(e) Retificado

(f) Pixels retificados

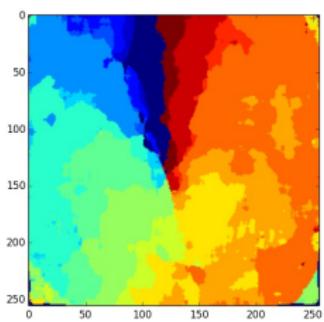


(a) Original

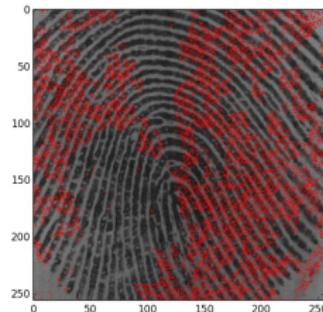


(b) Watershed

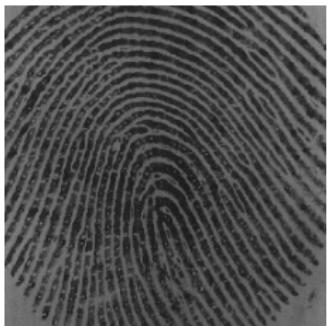
(c) Direção watershed



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



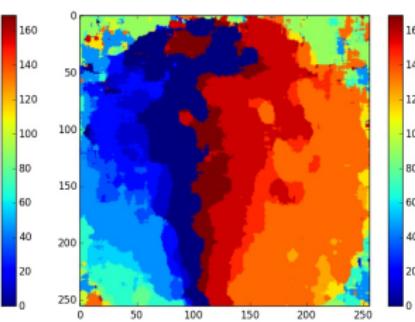
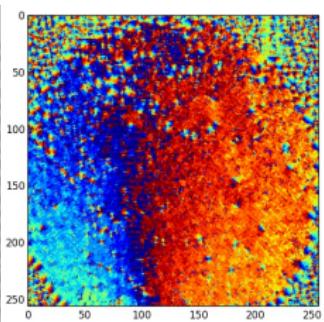
(e) Marcadores



(a) Original



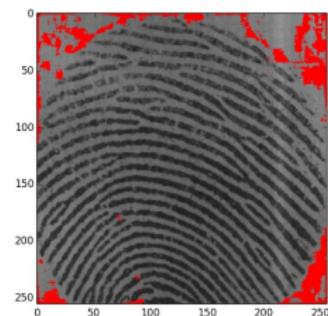
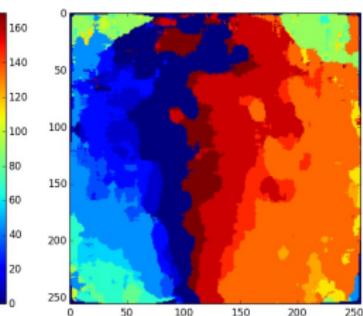
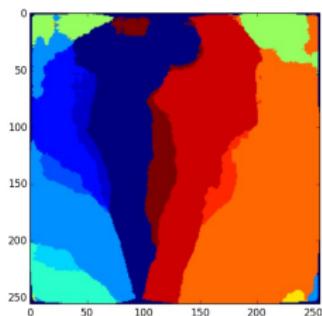
(b) Resultado final



(a) Original

(b) Info. Direcional

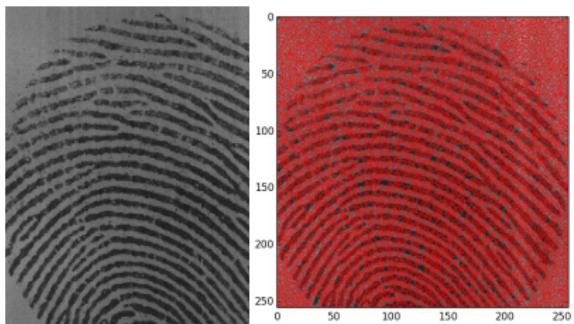
(c) Janela 15x15



(d) Janela 45x45

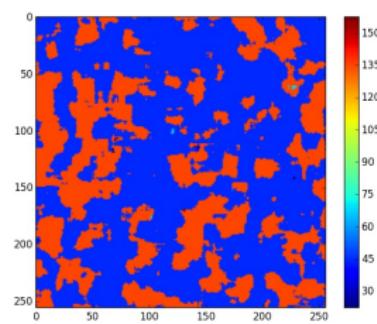
(e) Retificado

(f) Pixels retificados

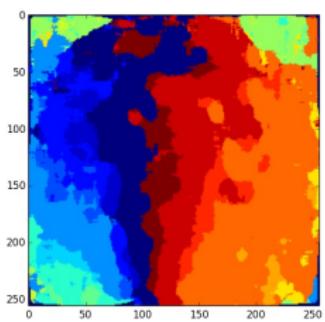


(a) Original

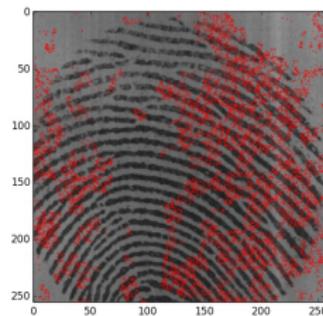
(b) Watershed



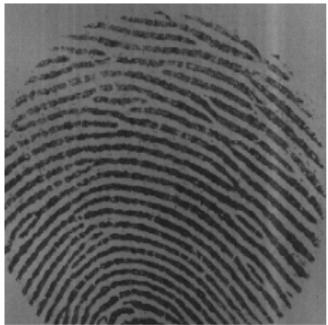
(c) Direção watershed



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



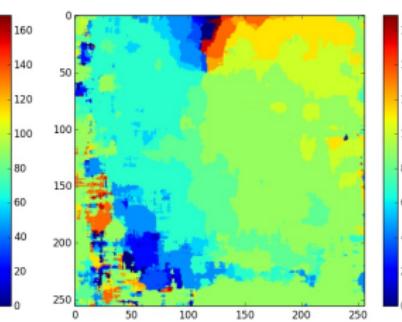
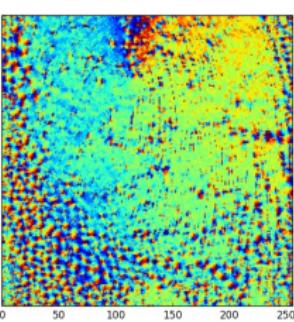
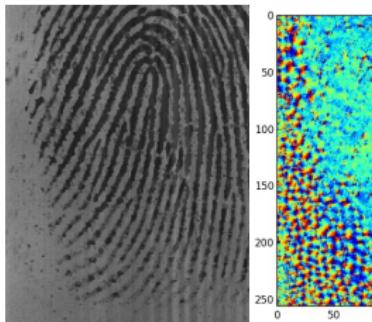
(e) Marcadores



(a) Original



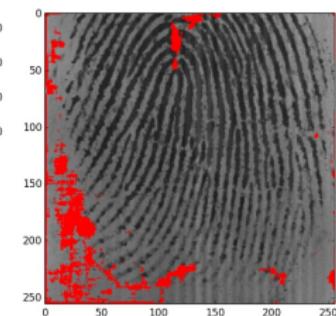
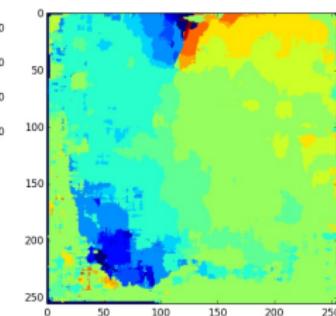
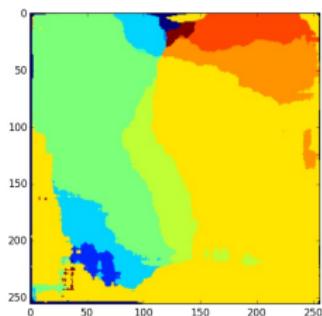
(b) Resultado final



(a) Original

(b) Info. Direcional

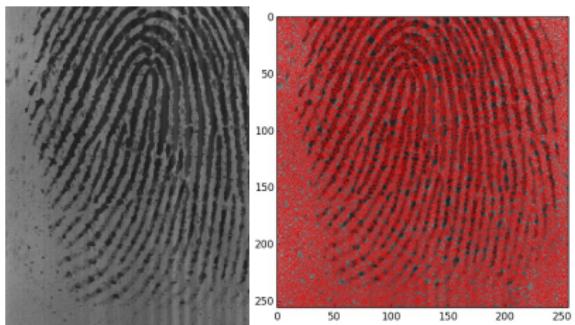
(c) Janela 15x15



(d) Janela 45x45

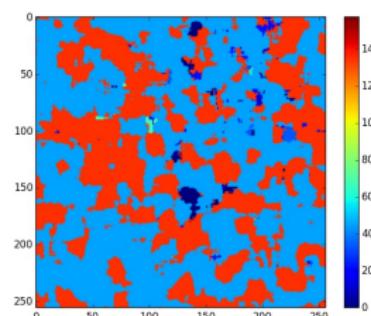
(e) Retificado

(f) Pixels retificados

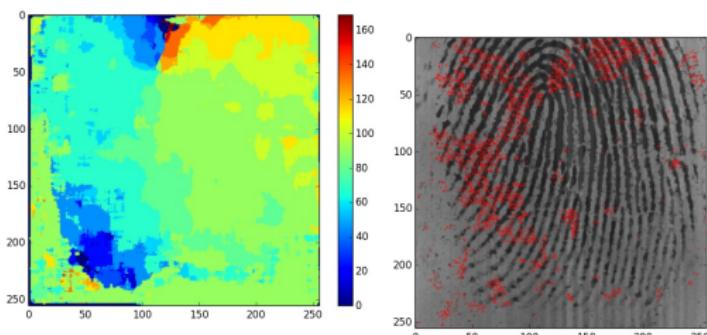


(a) Original

(b) Watershed

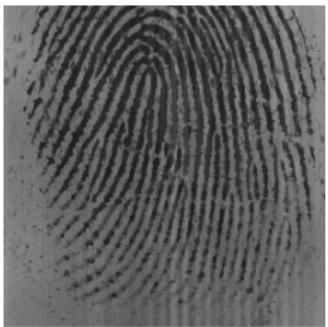


(c) Direção watershed



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

(e) Marcadores



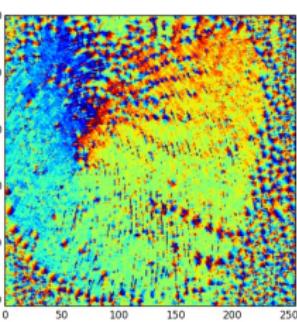
(a) Original



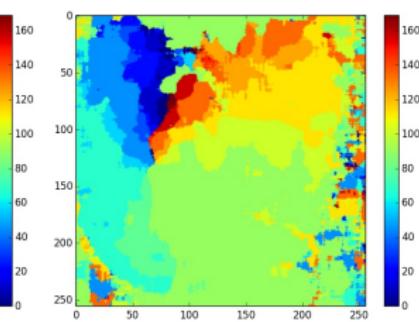
(b) Resultado final



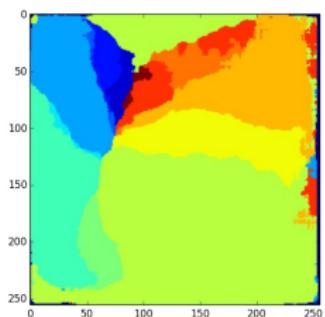
(a) Original



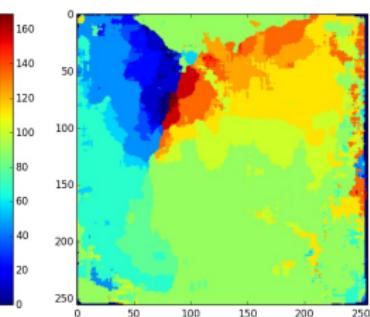
(b) Info. Direcional



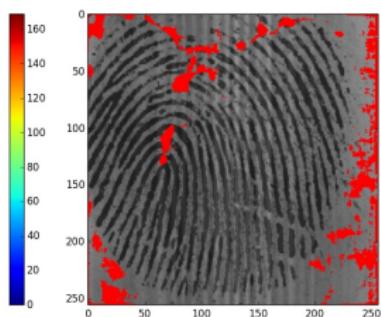
(c) Janela 15x15



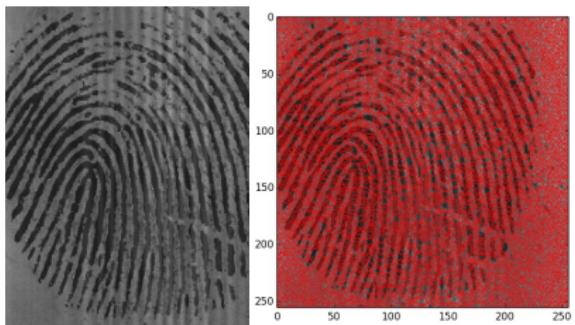
(d) Janela 45x45



(e) Retificado

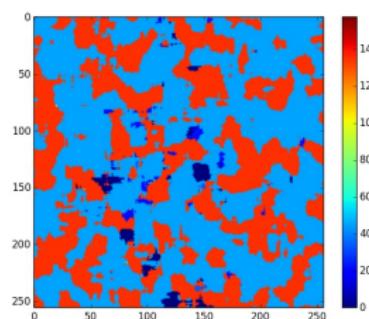


(f) Pixels retificados

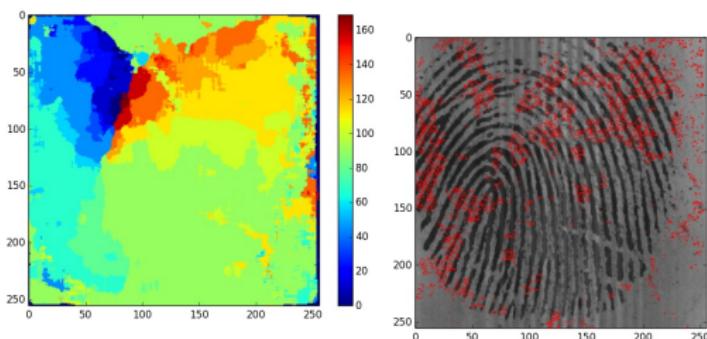


(a) Original

(b) Watershed



(c) Direção watershed



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

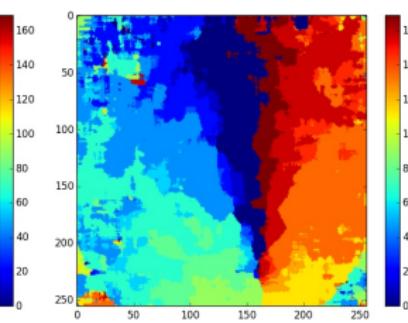
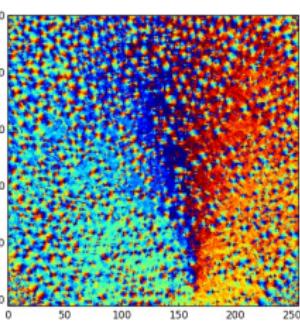
(e) Marcadores



(a) Original



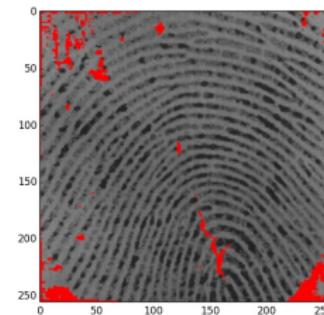
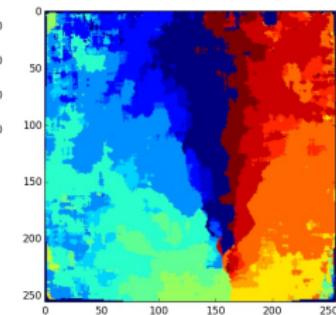
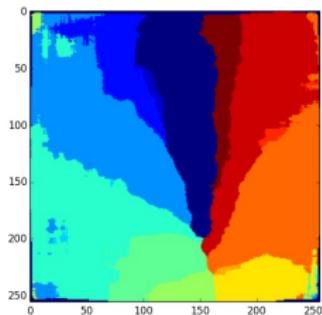
(b) Resultado final



(a) Original

(b) Info. Direcional

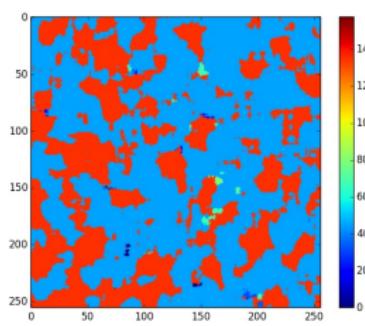
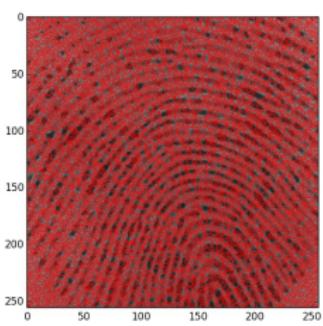
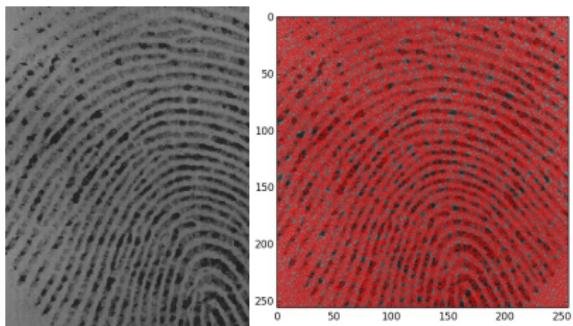
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

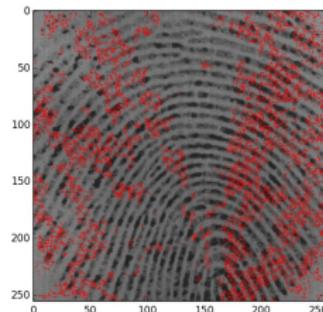
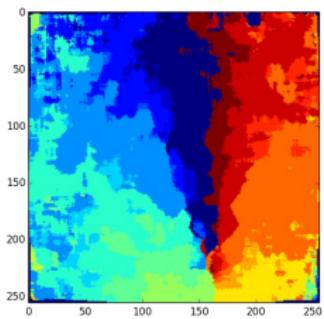
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



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

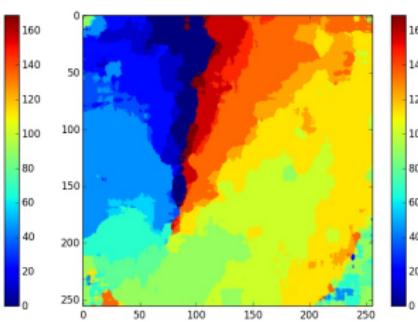
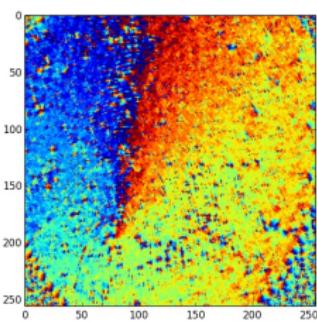
(e) Marcadores



(a) Original



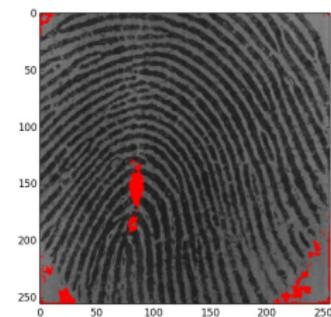
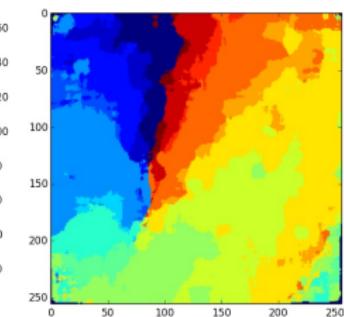
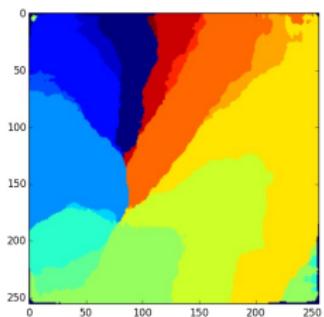
(b) Resultado final



(a) Original

(b) Info. Direcional

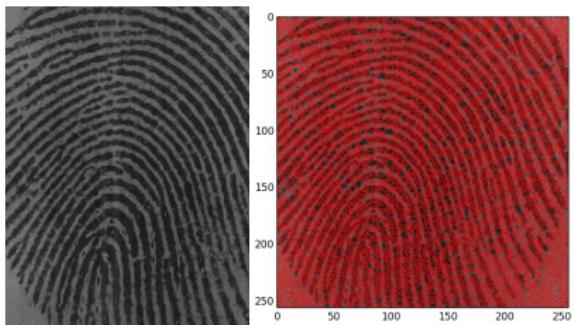
(c) Janela 15x15



(d) Janela 45x45

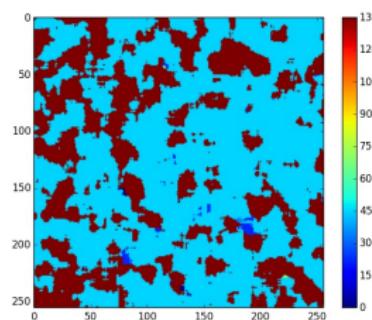
(e) Retificado

(f) Pixels retificados

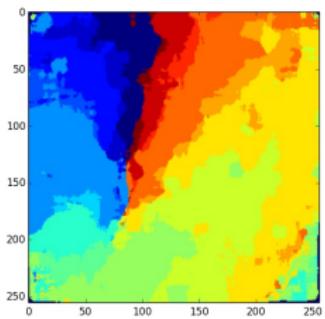


(a) Original

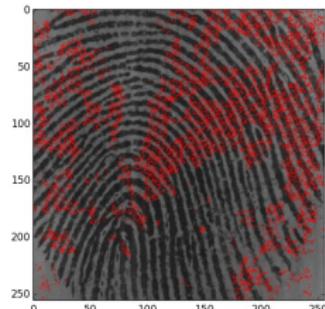
(b) Watershed



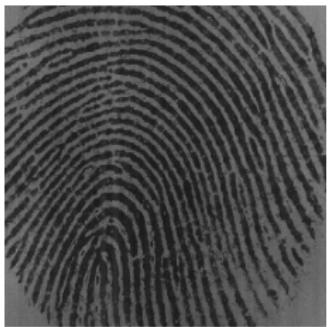
(c) Direção watershed



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



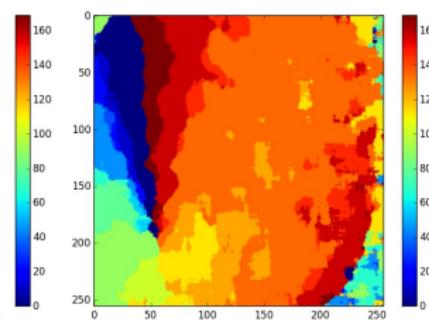
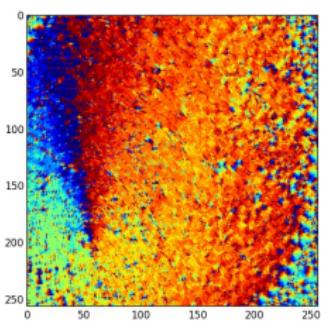
(e) Marcadores



(a) Original



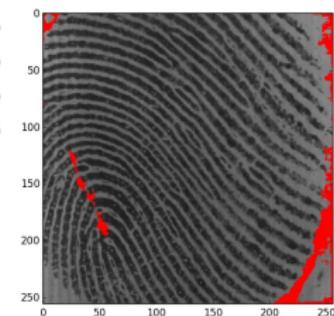
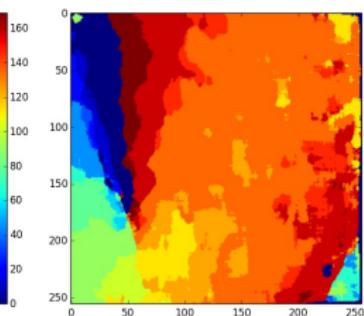
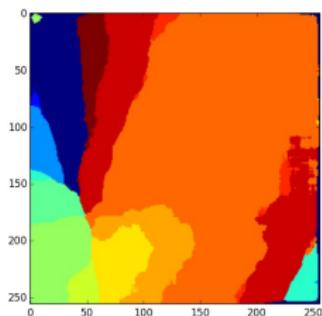
(b) Resultado final



(a) Original

(b) Info. Direcional

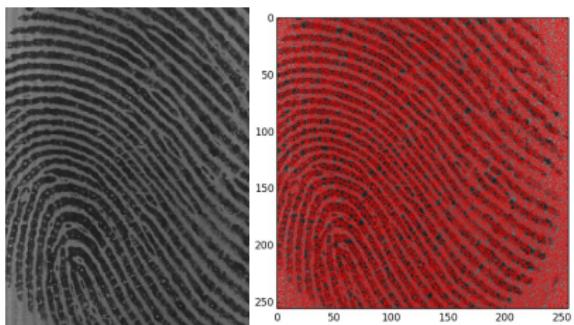
(c) Janela 15x15



(d) Janela 45x45

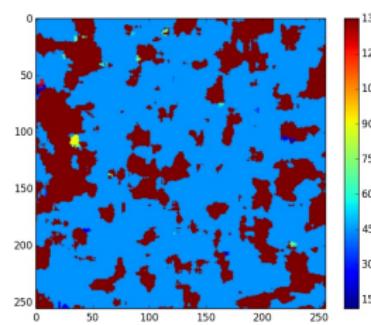
(e) Retificado

(f) Pixels retificados

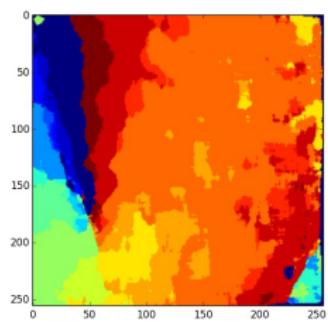


(a) Original

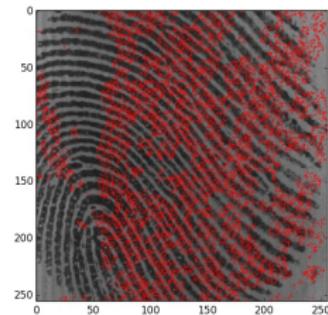
(b) Watershed



(c) Direção watershed



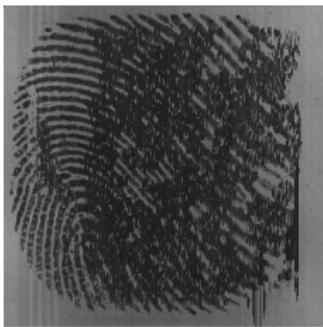
(d) Info. Direcional
retificada (fig. original)



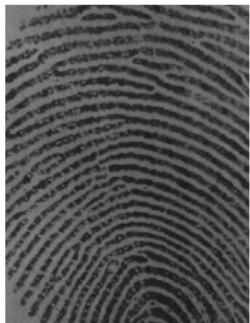
(e) Marcadores



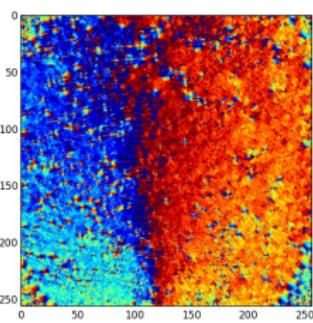
(a) Original



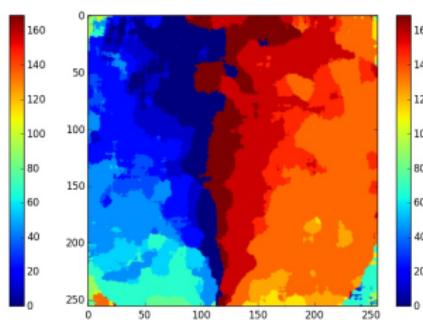
(b) Resultado final



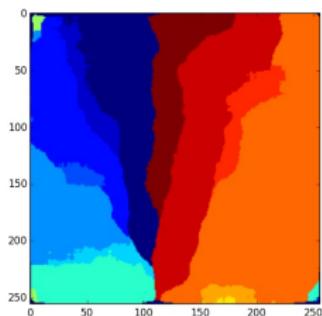
(a) Original



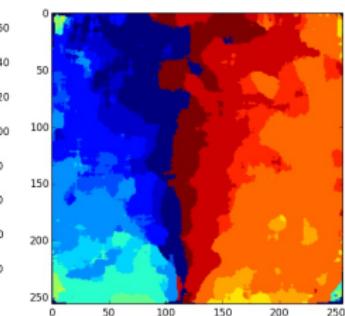
(b) Info. Direcional



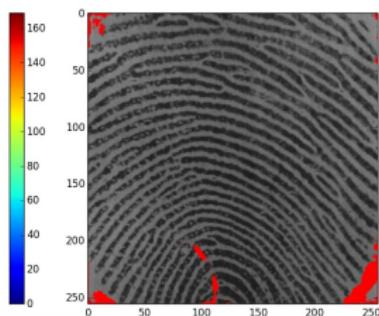
(c) Janela 15x15



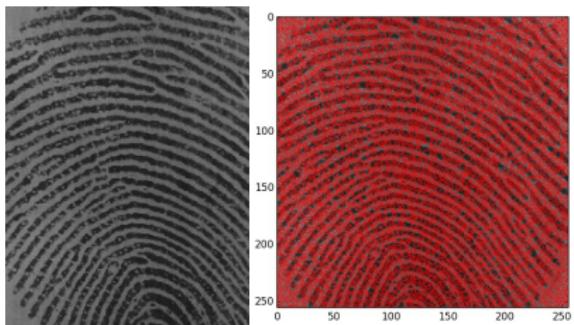
(d) Janela 45x45



(e) Retificado

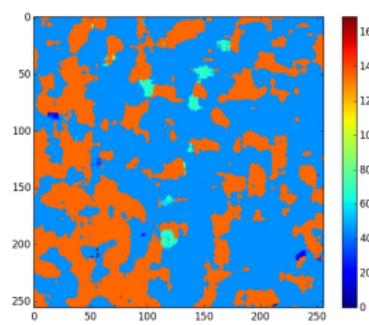


(f) Pixels retificados

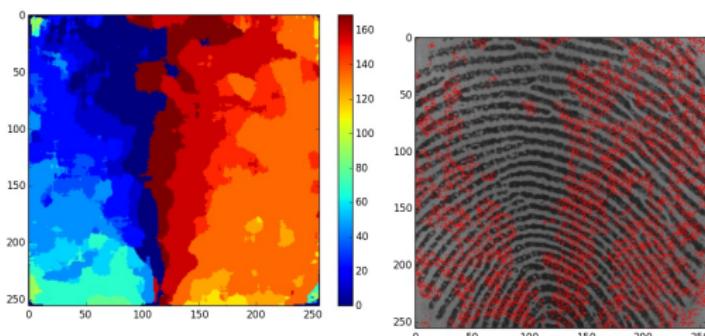


(a) Original

(b) Watershed

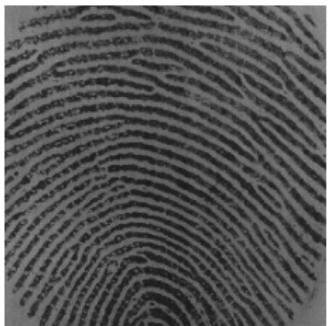


(c) Direção watershed



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

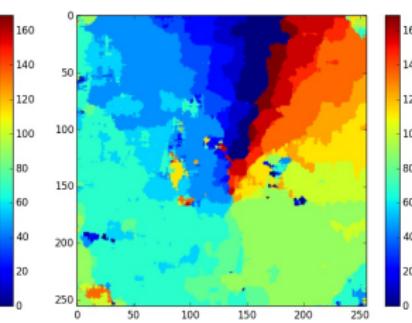
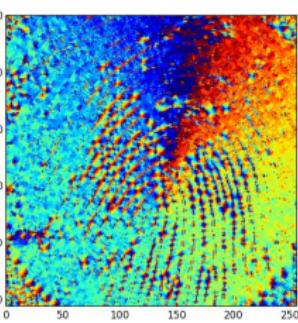
(e) Marcadores



(a) Original



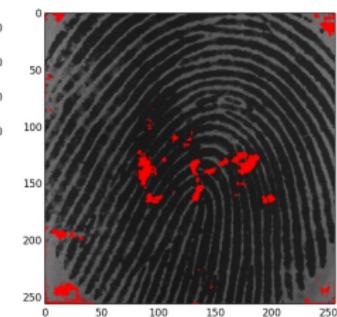
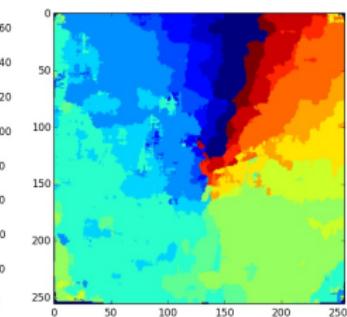
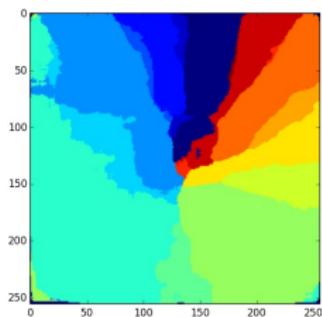
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



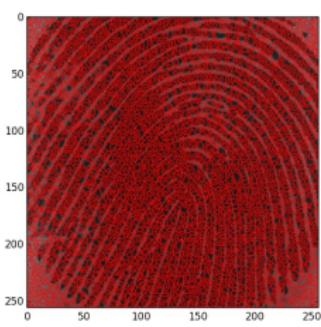
(d) Janela 45x45

(e) Retificado

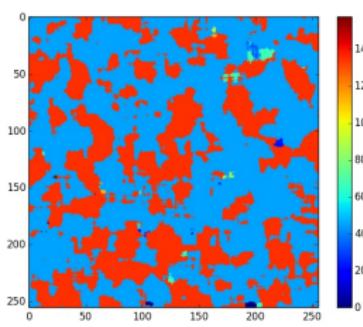
(f) Pixels retificados



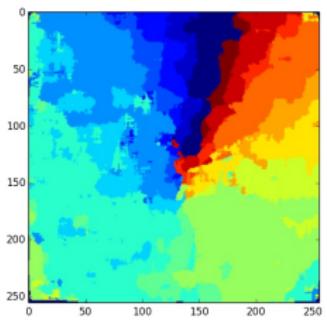
(a) Original



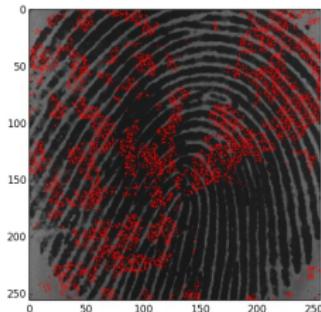
(b) Watershed



(c) Direção watershed



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



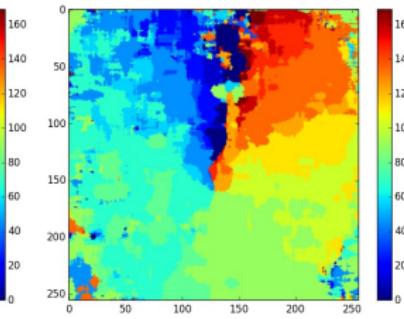
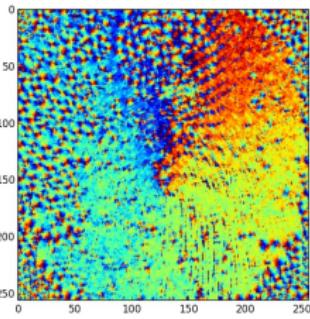
(e) Marcadores



(a) Original



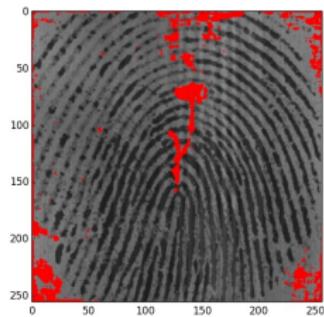
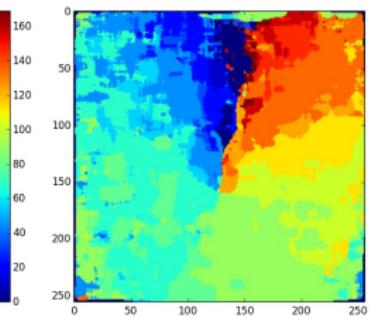
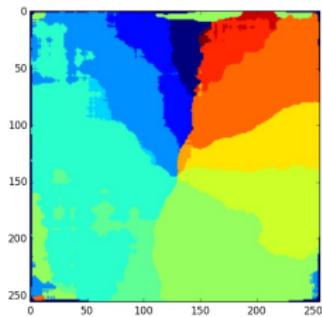
(b) Resultado final



(a) Original

(b) Info. Direcional

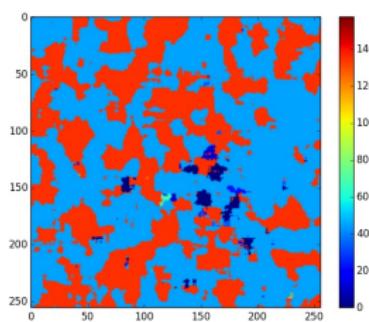
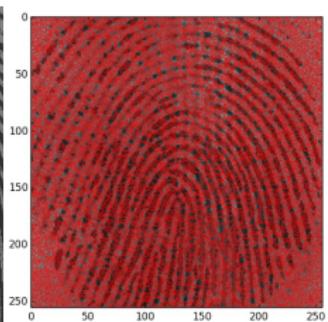
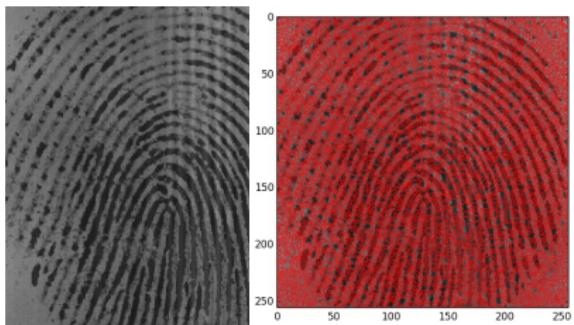
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

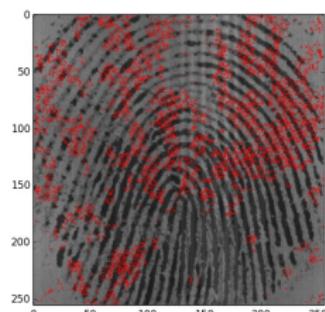
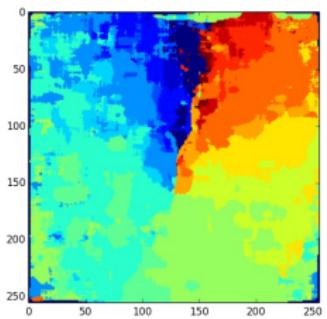
(f) Pixels retificados



(a) Original

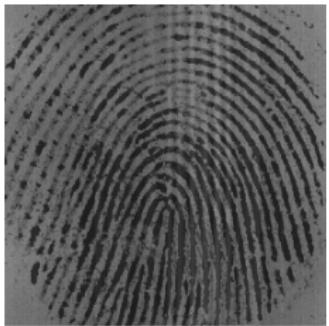
(b) Watershed

(c) Direção watershed

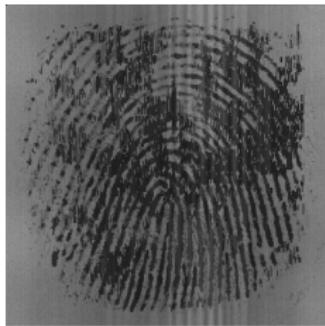


(d) Info. Direcional
retificada (fig. original)

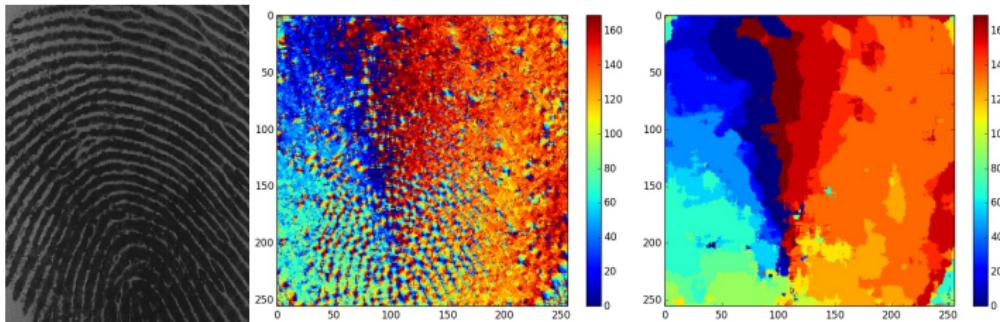
(e) Marcadores



(a) Original



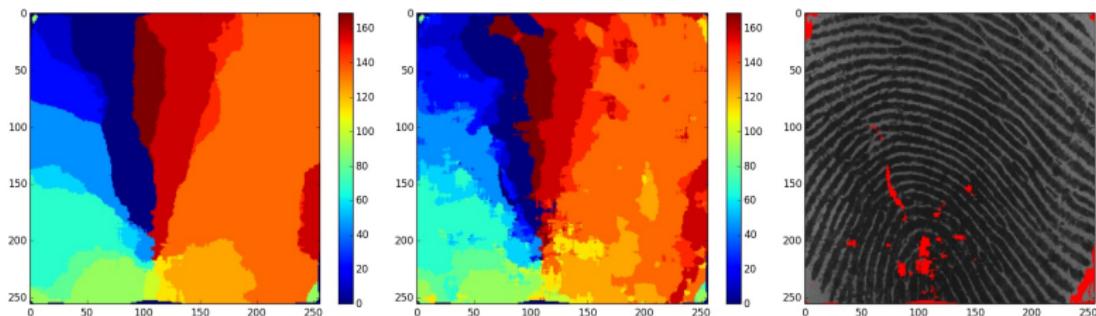
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



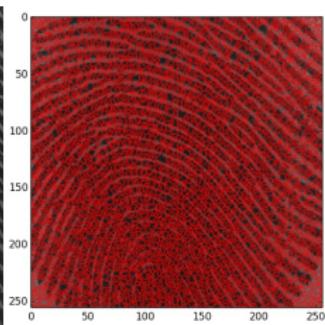
(d) Janela 45x45

(e) Retificado

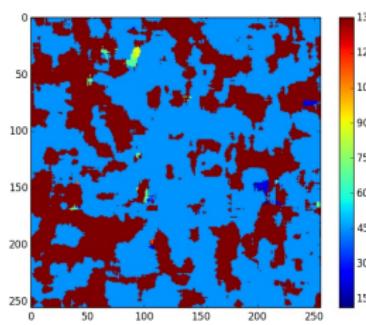
(f) Pixels retificados



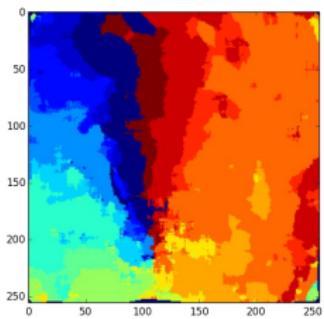
(a) Original



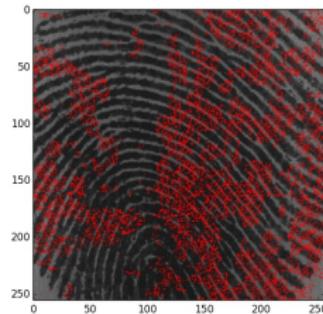
(b) Watershed



(c) Direção watershed



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



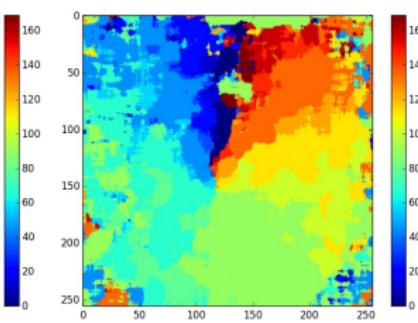
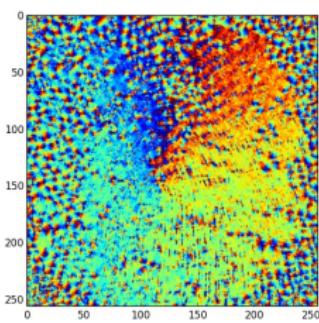
(e) Marcadores



(a) Original



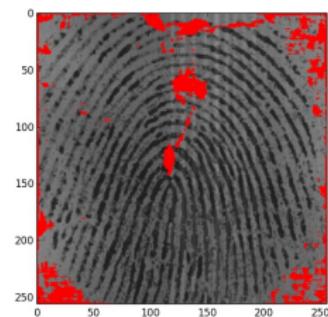
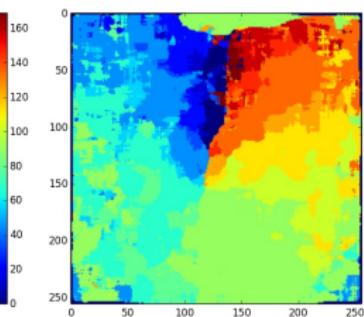
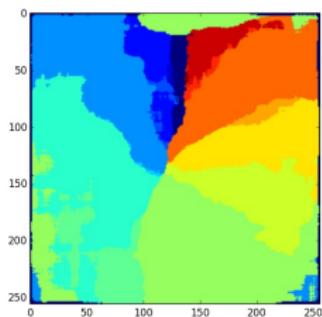
(b) Resultado final



(a) Original

(b) Info. Direcional

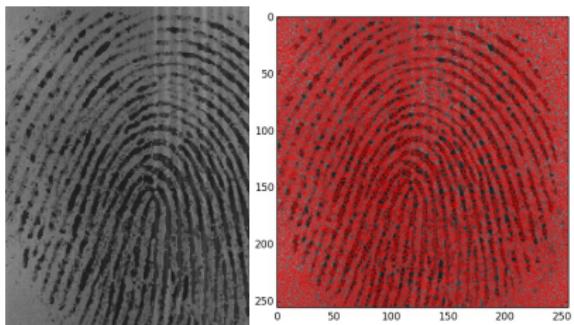
(c) Janela 15x15



(d) Janela 45x45

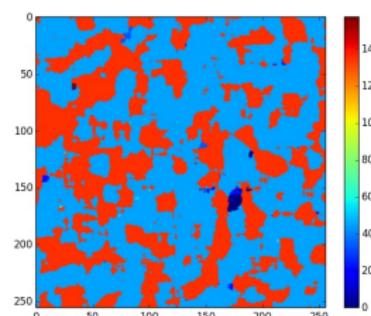
(e) Retificado

(f) Pixels retificados

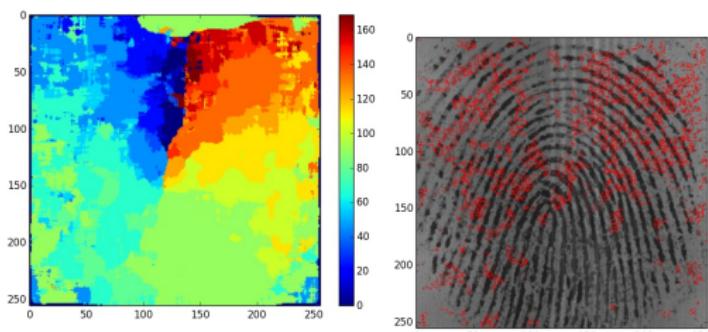


(a) Original

(b) Watershed

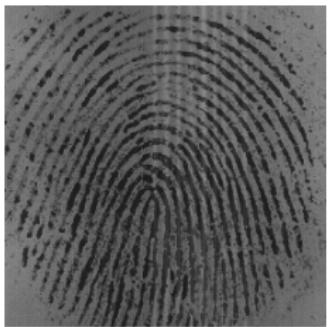


(c) Direção watershed



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

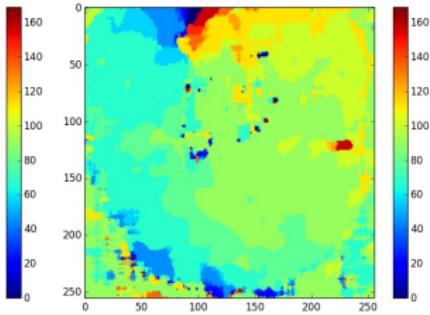
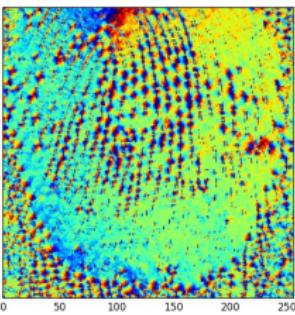
(e) Marcadores



(a) Original



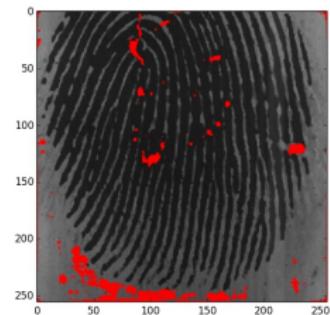
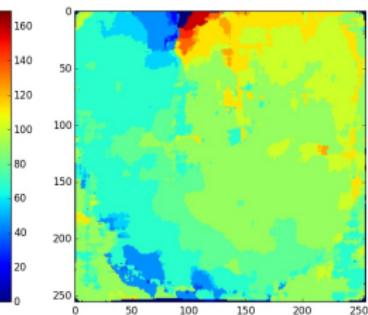
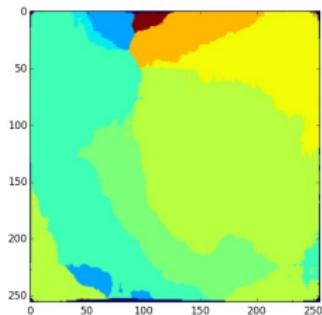
(b) Resultado final



(a) Original

(b) Info. Direcional

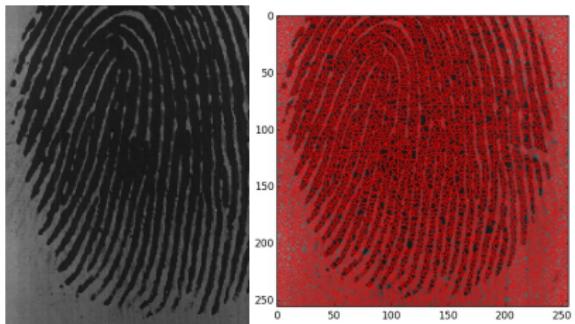
(c) Janela 15x15



(d) Janela 45x45

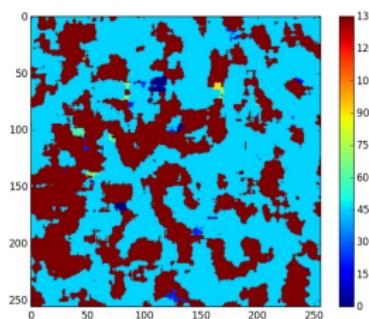
(e) Retificado

(f) Pixels retificados

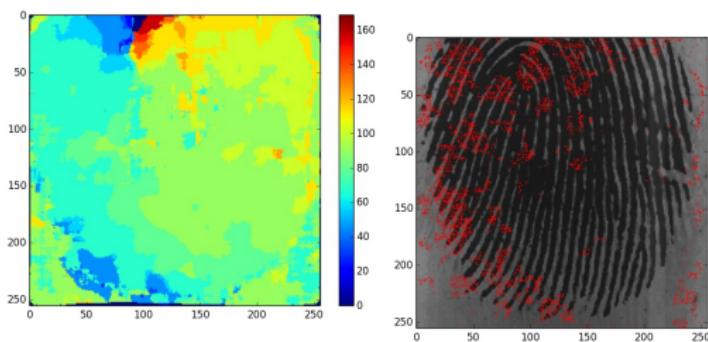


(a) Original

(b) Watershed



(c) Direção watershed



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

(e) Marcadores



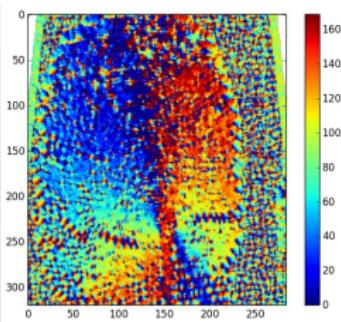
(a) Original



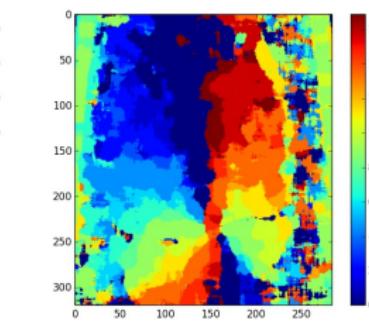
(b) Resultado final



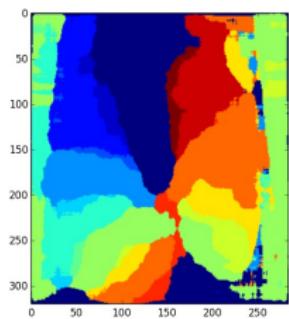
(a) Original



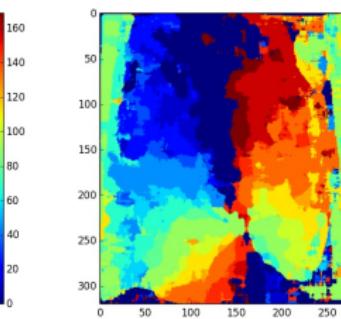
(b) Info. Direcional



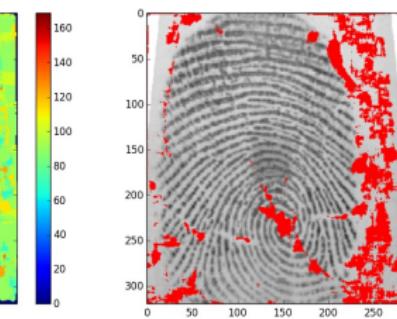
(c) Janela 15x15



(d) Janela 45x45



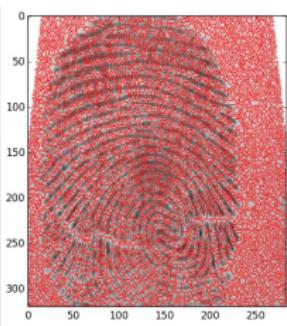
(e) Retificado



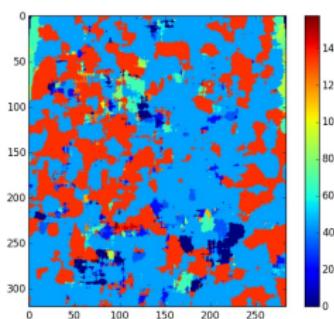
(f) Pixels retificados



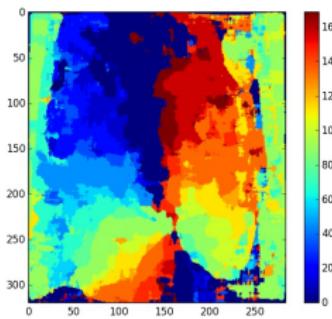
(a) Original



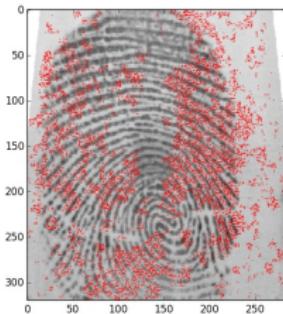
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



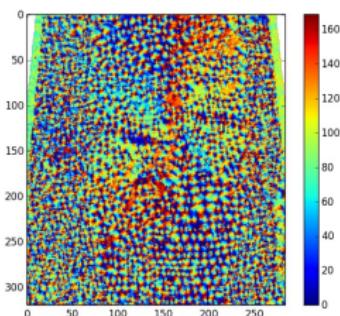
(a) Original



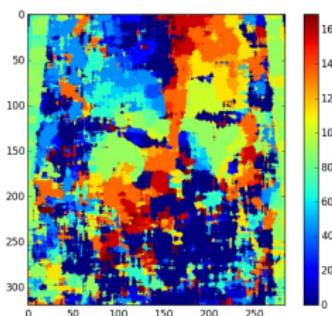
(b) Resultado final



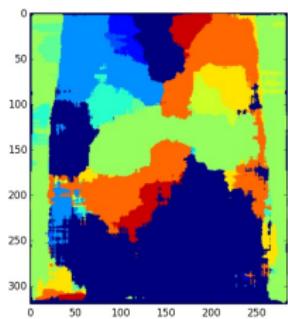
(a) Original



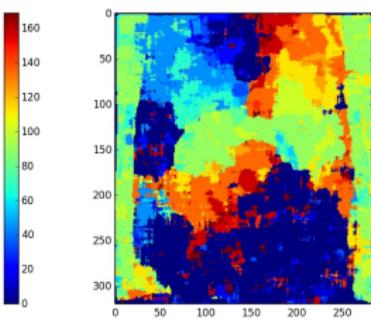
(b) Info. Direcional



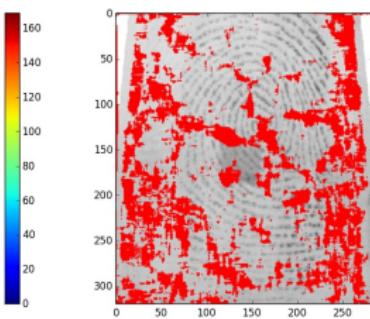
(c) Janela 15x15



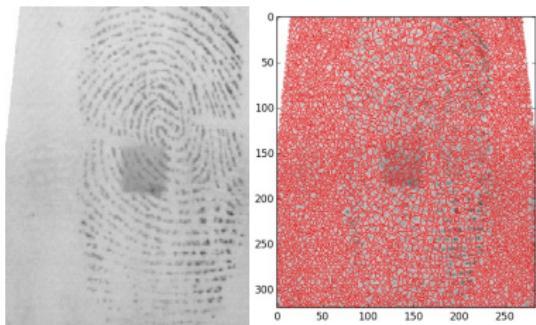
(d) Janela 45x45



(e) Retificado

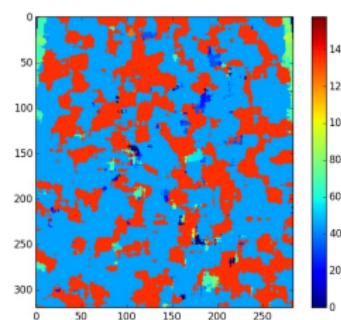


(f) Pixels retificados

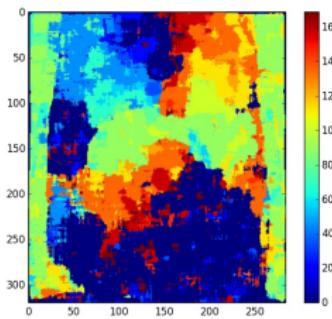


(a) Original

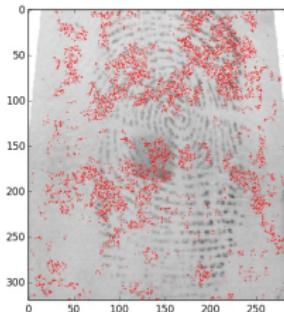
(b) Watershed



(c) Direção watershed



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



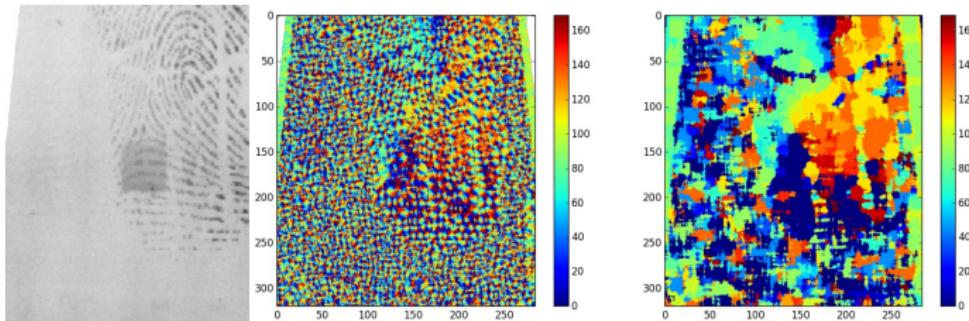
(e) Marcadores



(a) Original



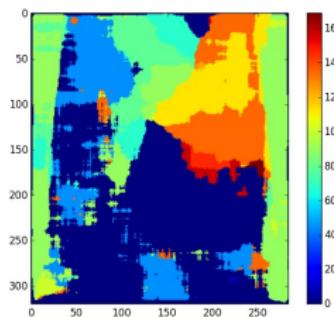
(b) Resultado final



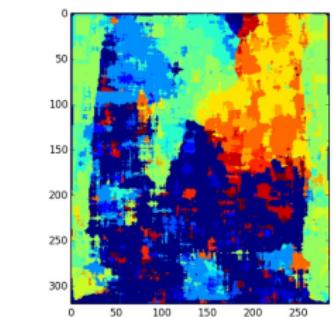
(a) Original

(b) Info. Direcional

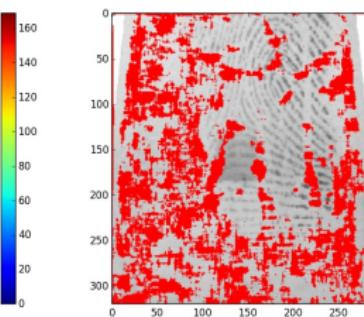
(c) Janela 15x15



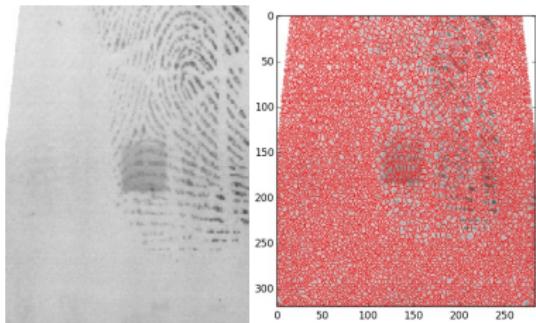
(d) Janela 45x45



(e) Retificado

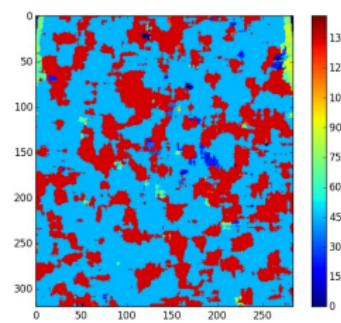


(f) Pixels retificados

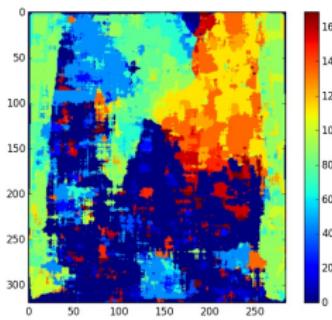


(a) Original

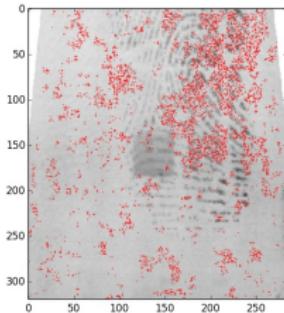
(b) Watershed



(c) Direção watershed



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



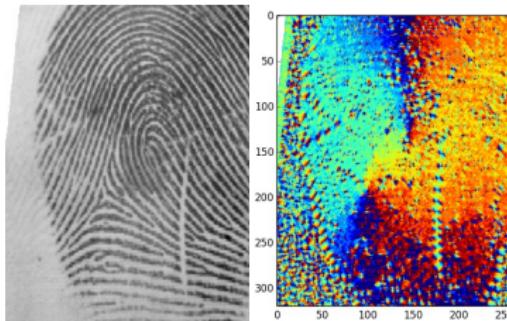
(e) Marcadores



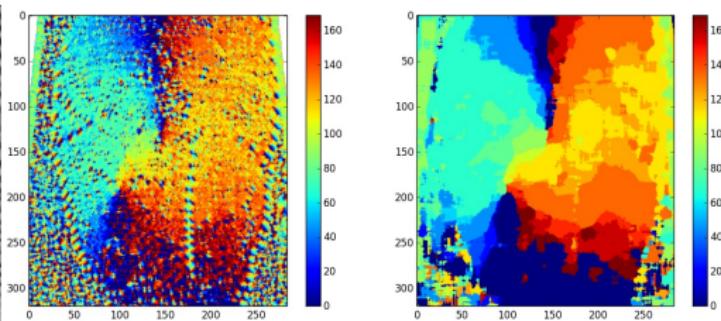
(a) Original



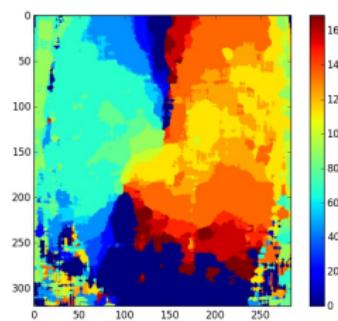
(b) Resultado final



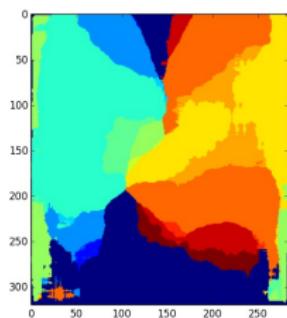
(a) Original



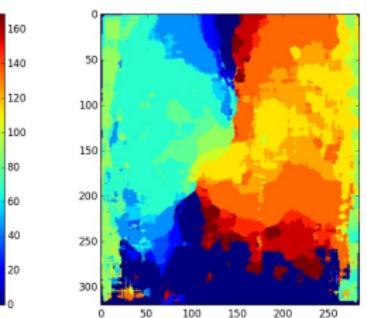
(b) Info. Direcional



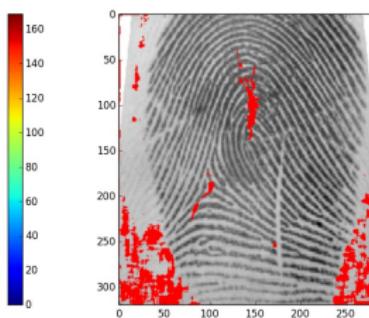
(c) Janela 15x15



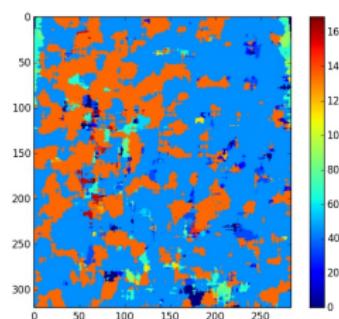
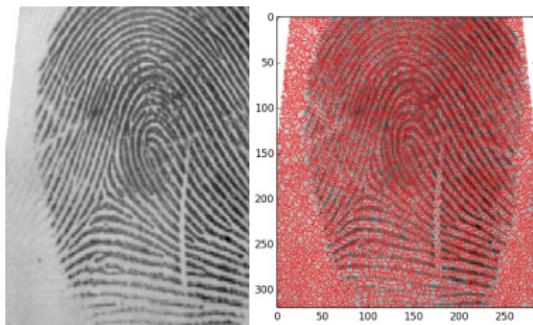
(d) Janela 45x45



(e) Retificado



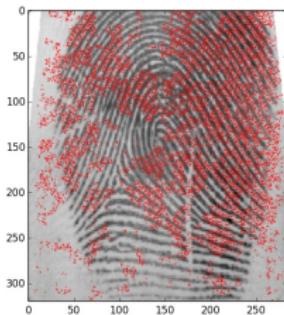
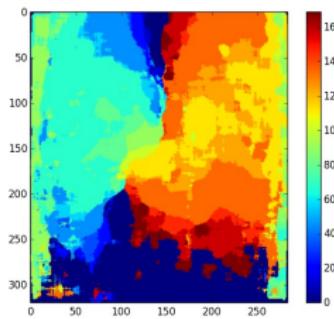
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



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

(e) Marcadores



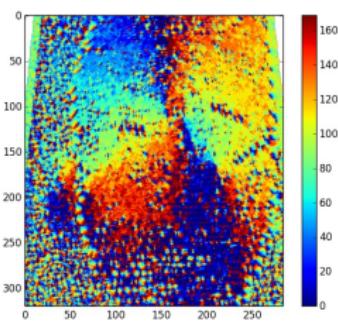
(a) Original



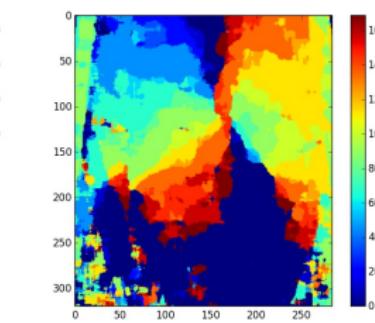
(b) Resultado final



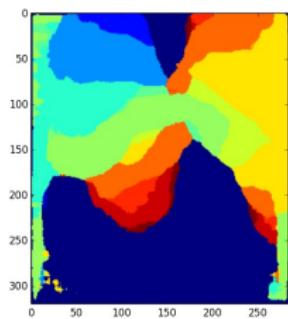
(a) Original



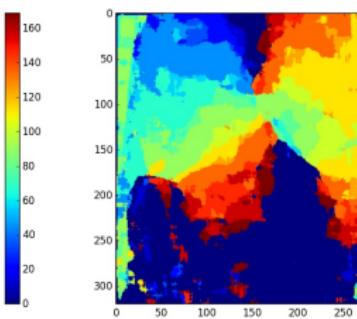
(b) Info. Direcional



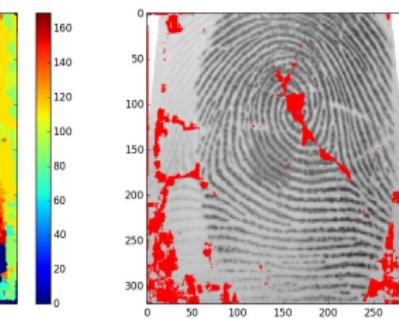
(c) Janela 15x15



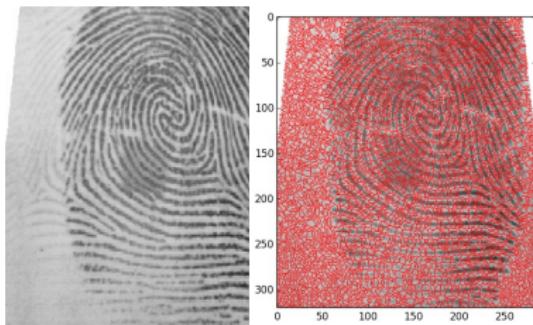
(d) Janela 45x45



(e) Retificado

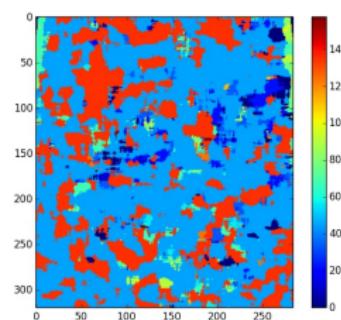


(f) Pixels retificados

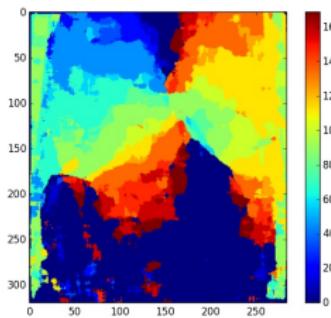


(a) Original

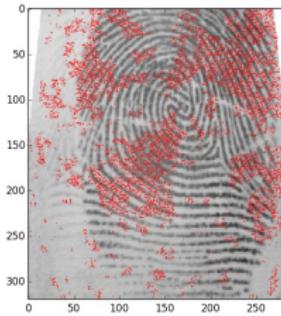
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



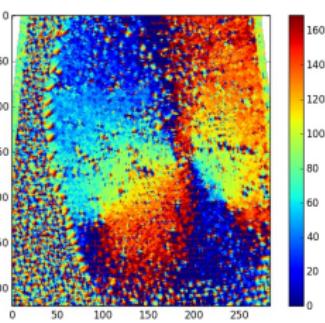
(a) Original



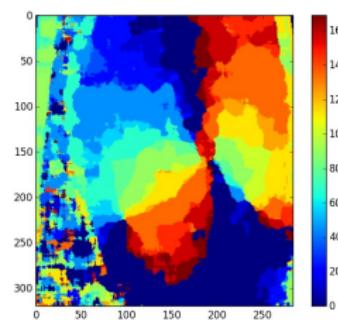
(b) Resultado final



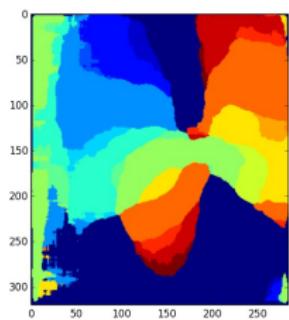
(a) Original



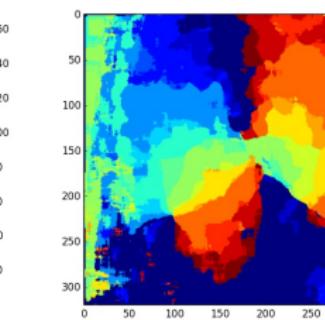
(b) Info. Direcional



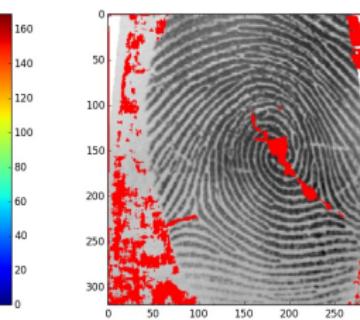
(c) Janela 15x15



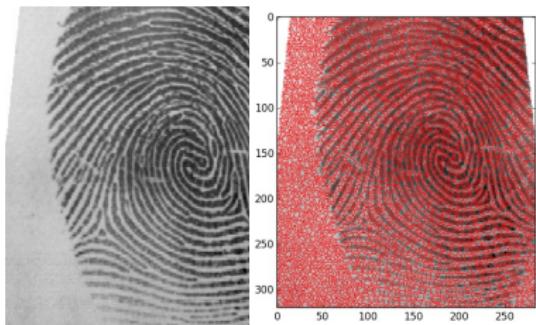
(d) Janela 45x45



(e) Retificado

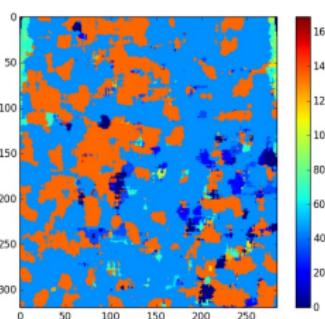


(f) Pixels retificados

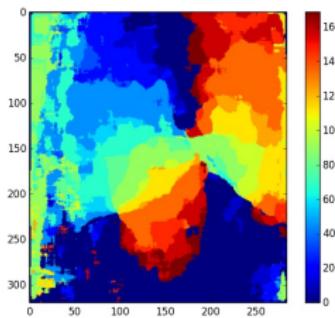


(a) Original

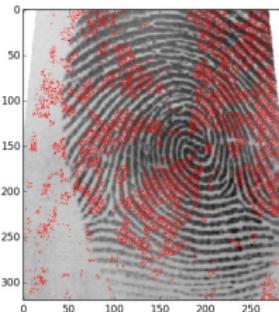
(b) Watershed



(c) Direção watershed



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



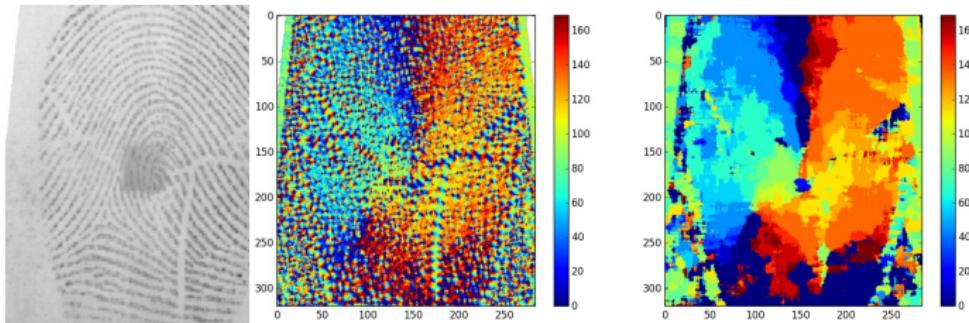
(e) Marcadores



(a) Original



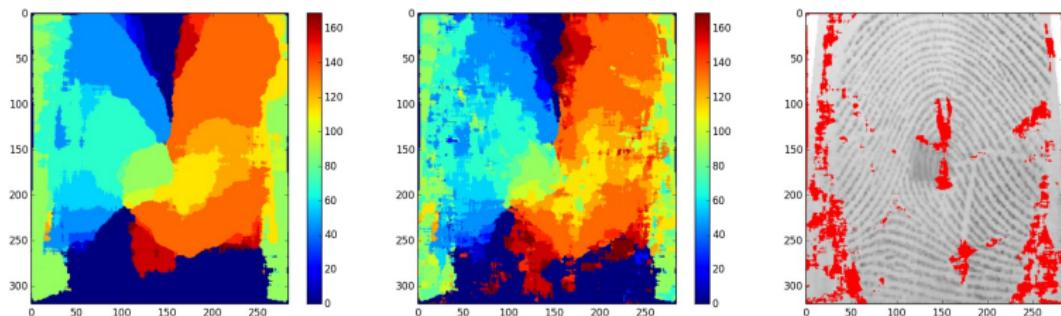
(b) Resultado final



(a) Original

(b) Info. Direcional

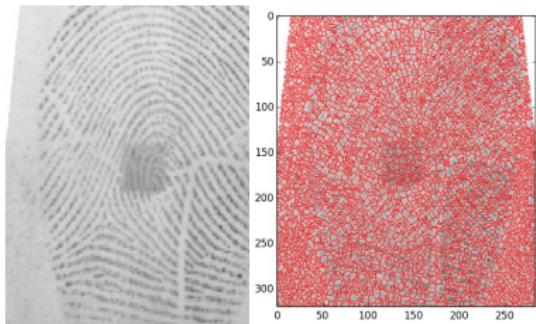
(c) Janela 15x15



(d) Janela 45x45

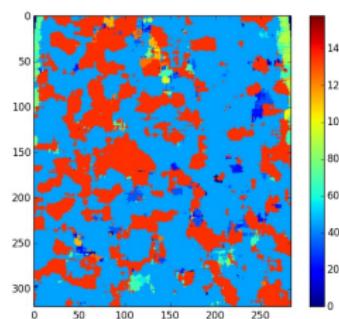
(e) Retificado

(f) Pixels retificados

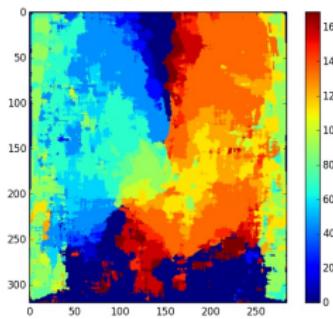


(a) Original

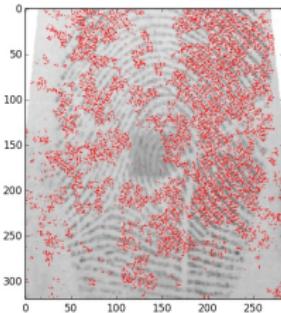
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



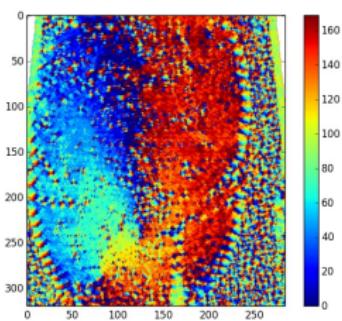
(a) Original



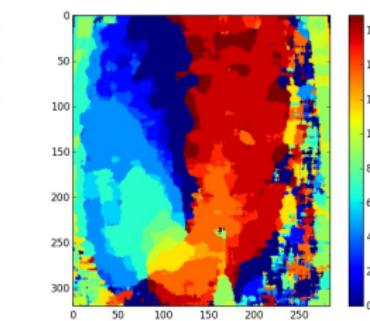
(b) Resultado final



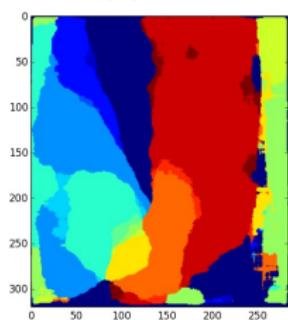
(a) Original



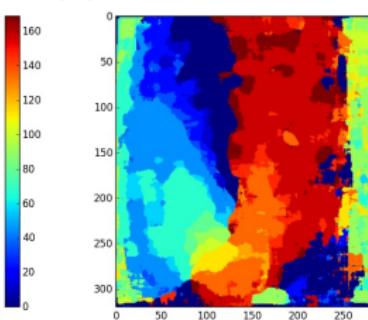
(b) Info. Direcional



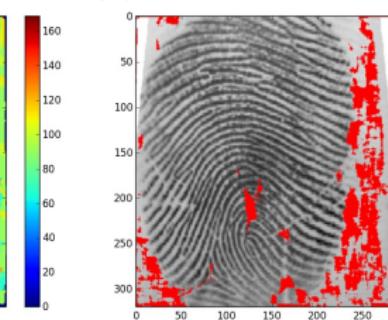
(c) Janela 15x15



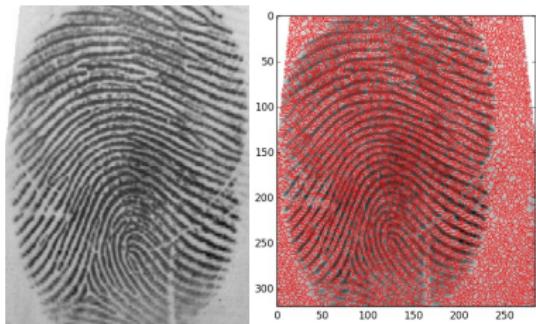
(d) Janela 45x45



(e) Retificado

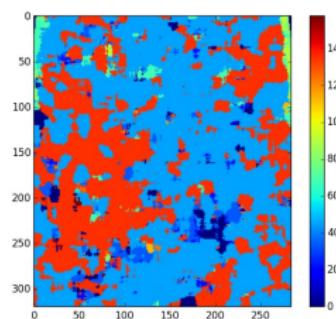


(f) Pixels retificados

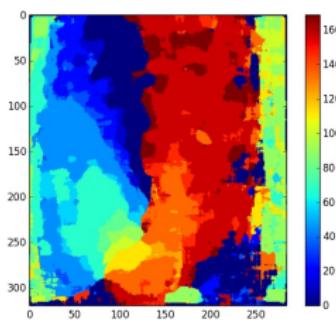


(a) Original

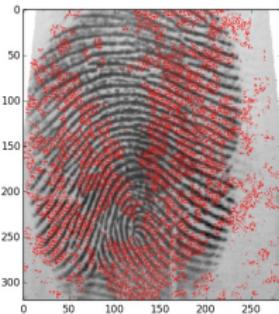
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



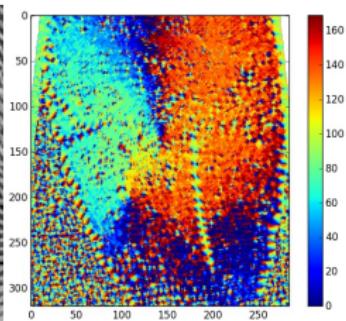
(a) Original



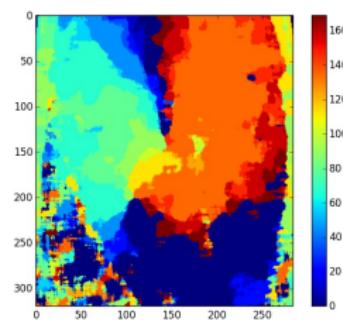
(b) Resultado final



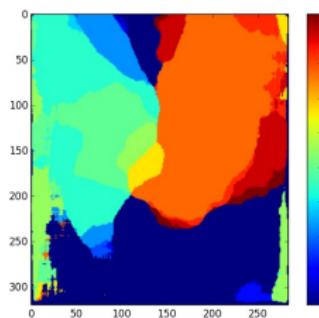
(a) Original



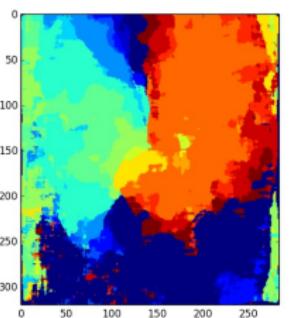
(b) Info. Direcional



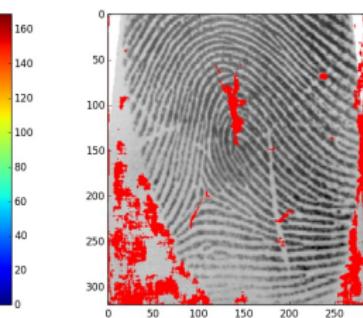
(c) Janela 15x15



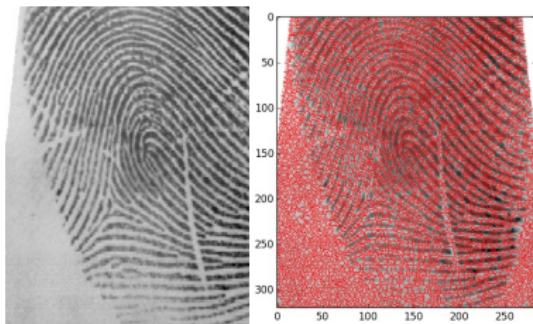
(d) Janela 45x45



(e) Retificado

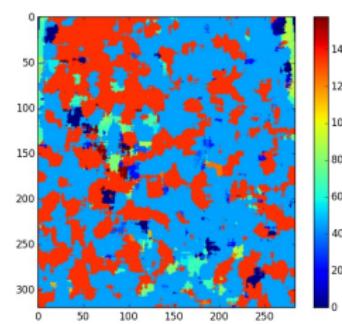


(f) Pixels retificados

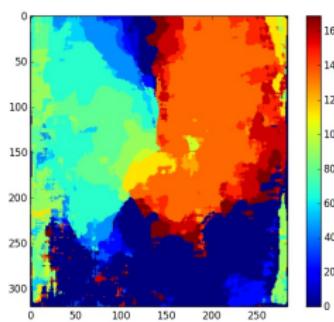


(a) Original

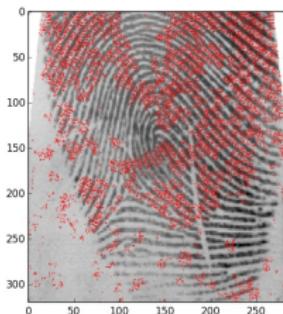
(b) Watershed



(c) Direção watershed



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



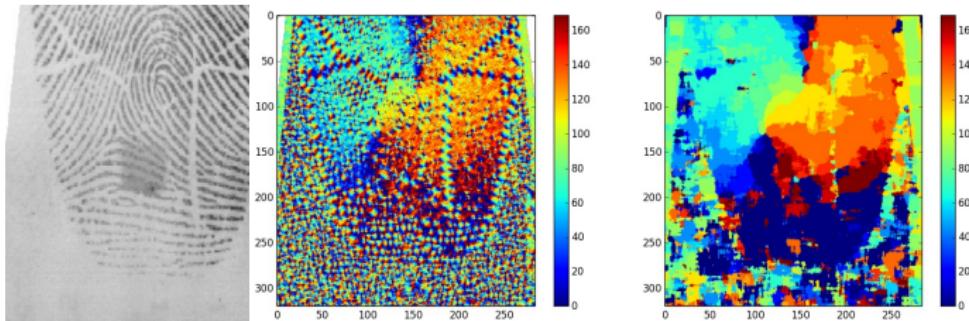
(e) Marcadores



(a) Original



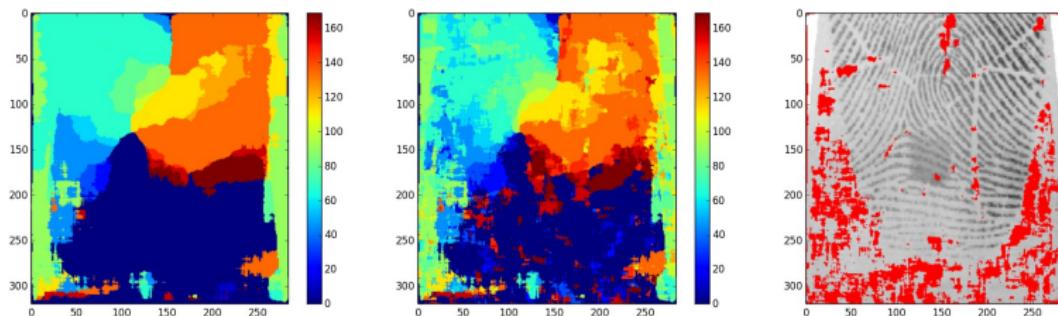
(b) Resultado final



(a) Original

(b) Info. Direcional

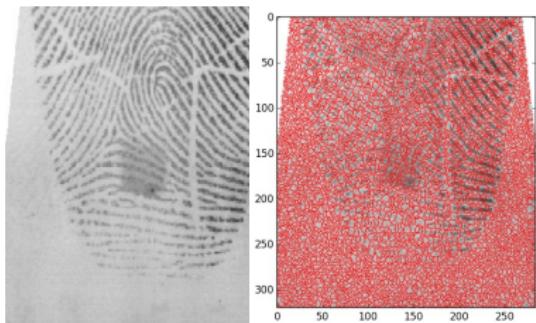
(c) Janela 15x15



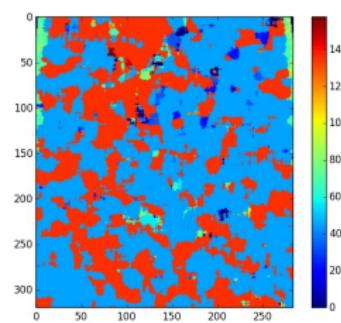
(d) Janela 45x45

(e) Retificado

(f) Pixels retificados

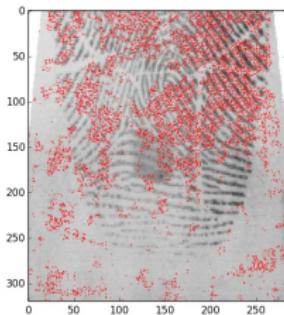
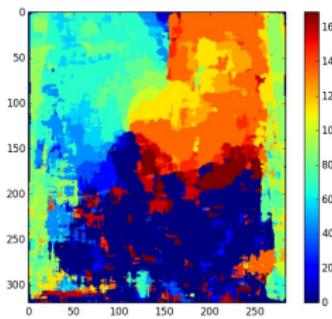


(a) Original



(b) Watershed

(c) Direção watershed



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

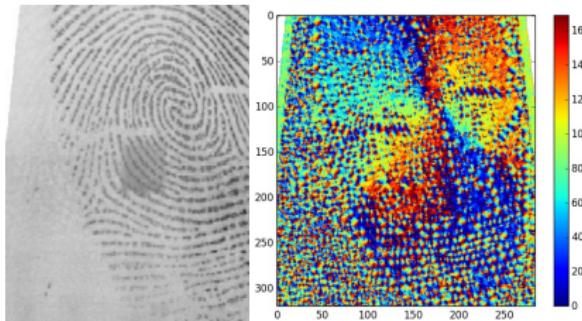
(e) Marcadores



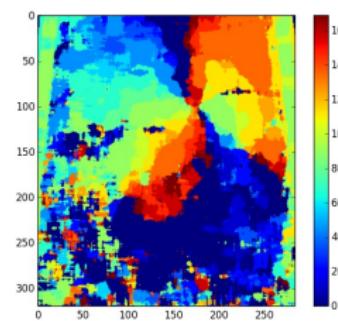
(a) Original



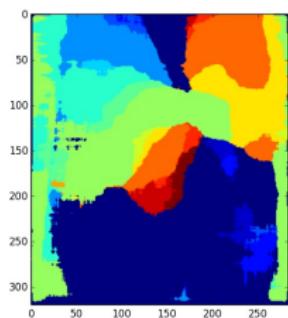
(b) Resultado final



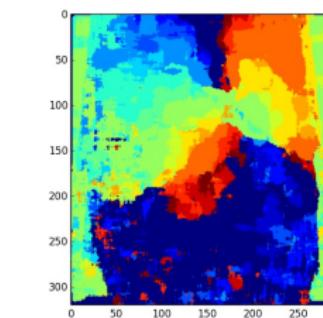
(a) Original



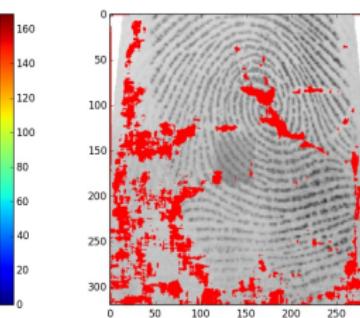
(b) Info. Direcional



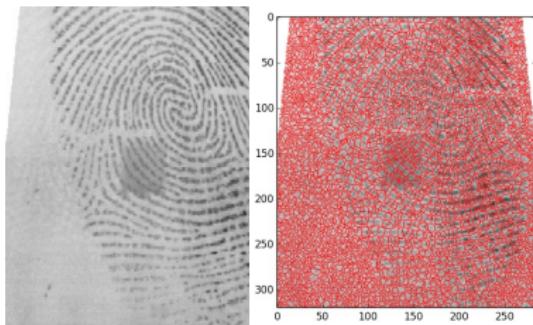
(d) Janela 15x15



(e) Retificado

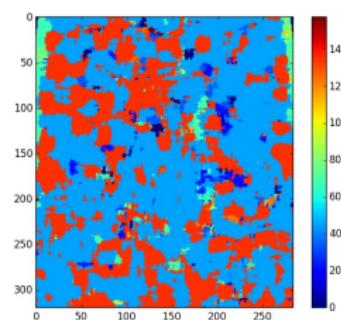


(f) Pixels retificados

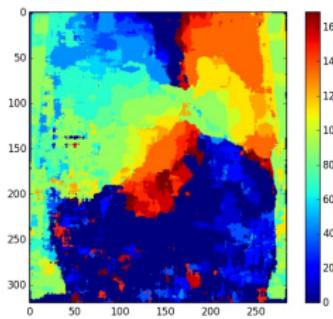


(a) Original

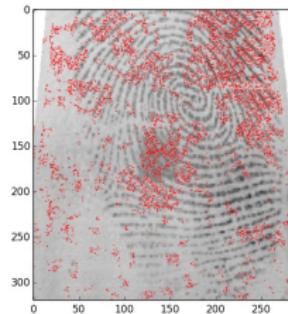
(b) Watershed



(c) Direção watershed



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



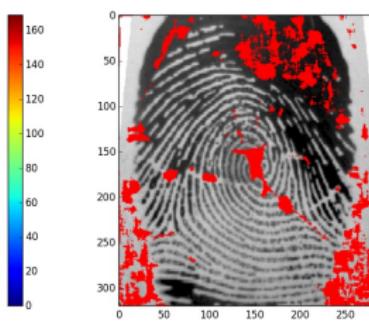
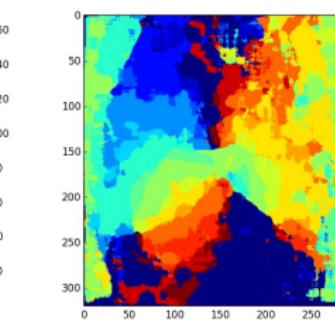
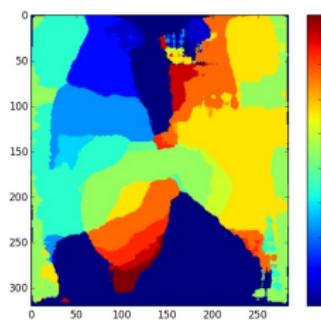
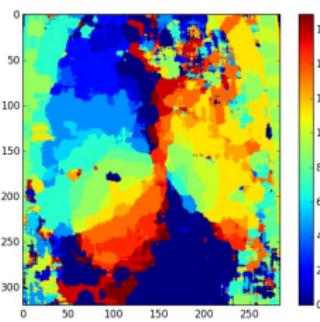
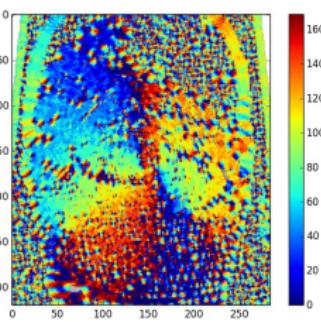
(e) Marcadores



(a) Original

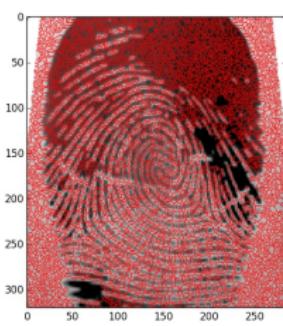


(b) Resultado final

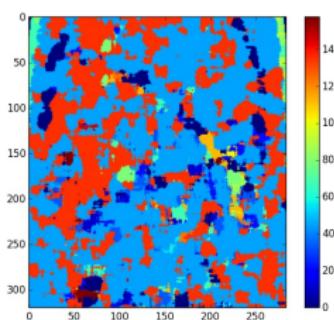




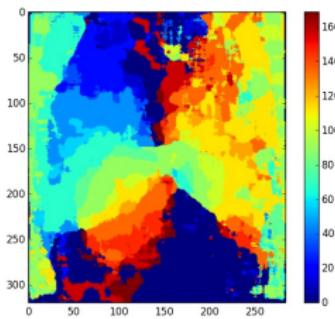
(a) Original



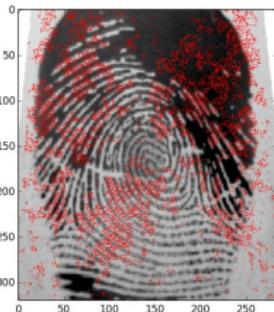
(b) Watershed



(c) Direção watershed



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



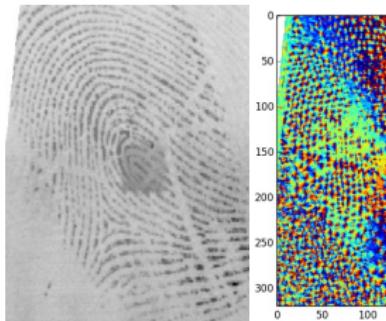
(e) Marcadores



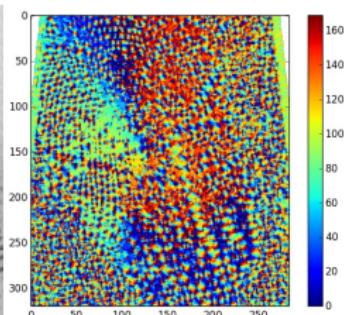
(a) Original



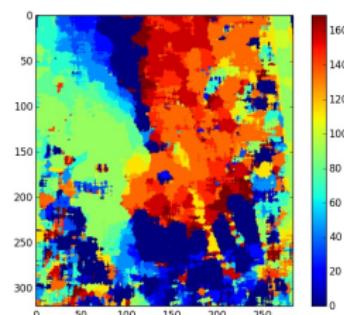
(b) Resultado final



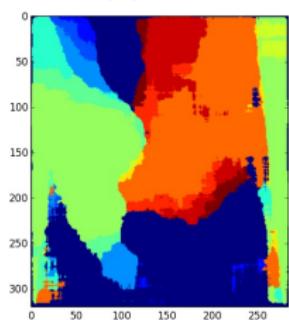
(a) Original



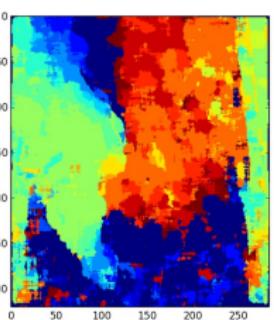
(b) Info. Direcional



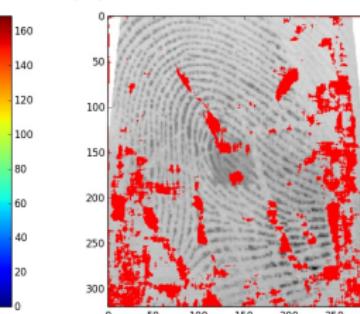
(c) Janela 15x15



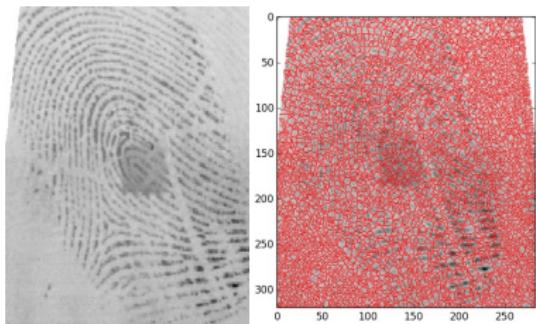
(d) Janela 45x45



(e) Retificado

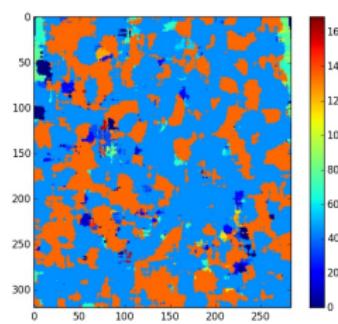


(f) Pixels retificados

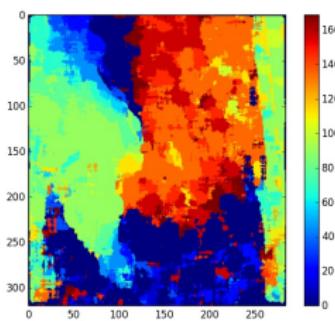


(a) Original

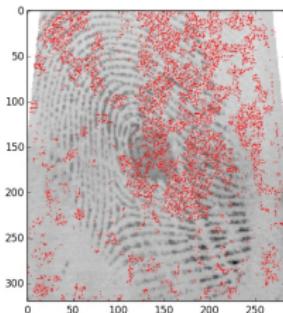
(b) Watershed



(c) Direção watershed



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



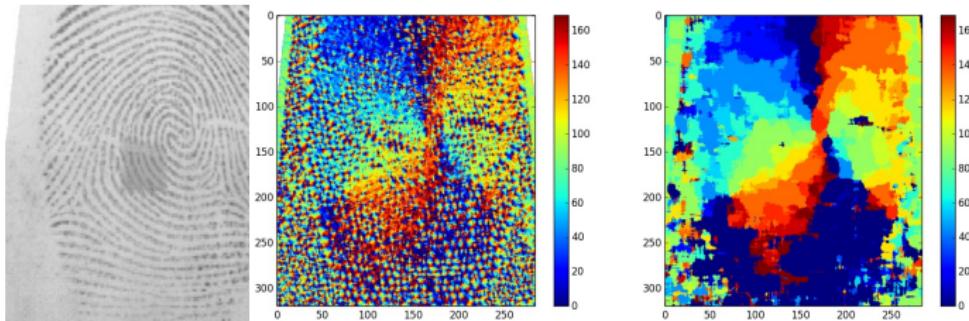
(e) Marcadores



(a) Original



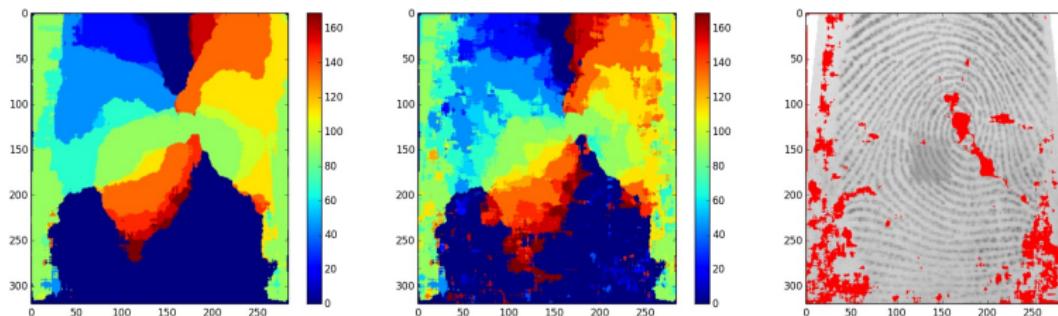
(b) Resultado final



(a) Original

(b) Info. Direcional

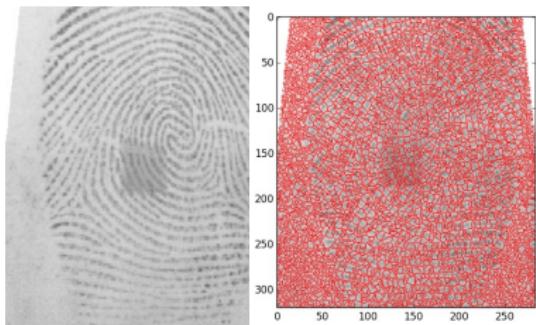
(c) Janela 15x15



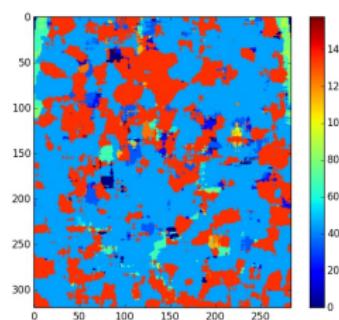
(d) Janela 45x45

(e) Retificado

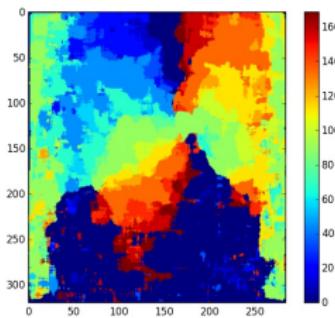
(f) Pixels retificados



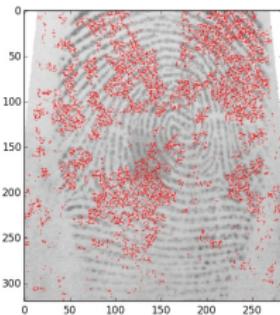
(a) Original



(b) Watershed



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



(e) Marcadores



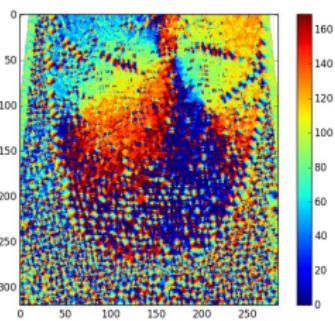
(a) Original



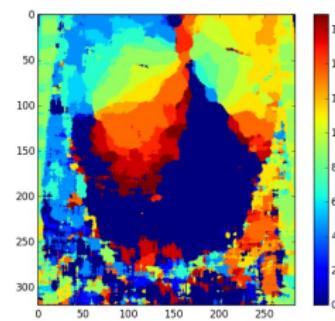
(b) Resultado final



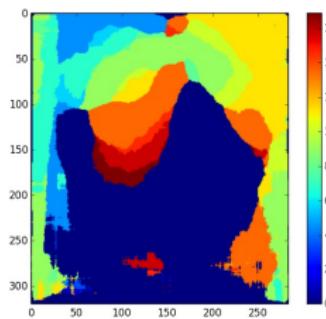
(a) Original



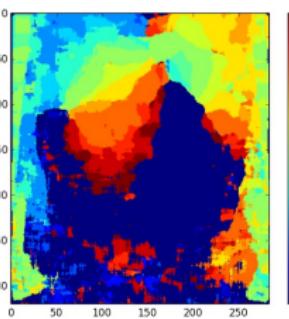
(b) Info. Direcional



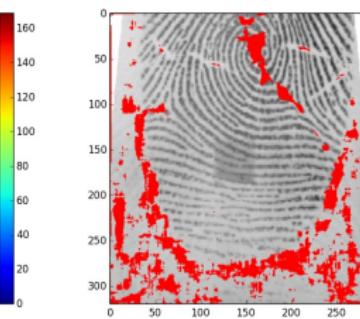
(c) Janela 15x15



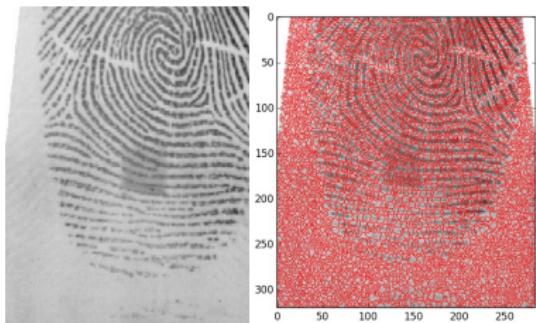
(d) Janela 45x45



(e) Retificado

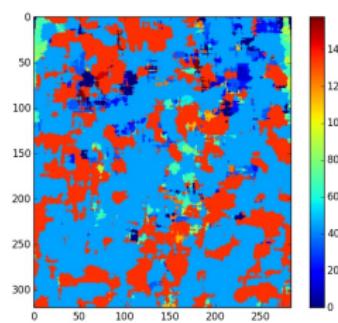


(f) Pixels retificados

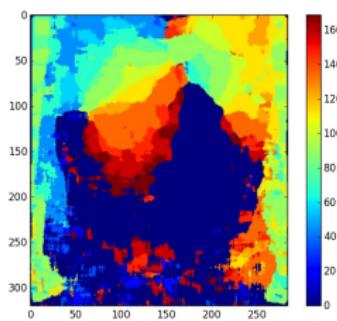


(a) Original

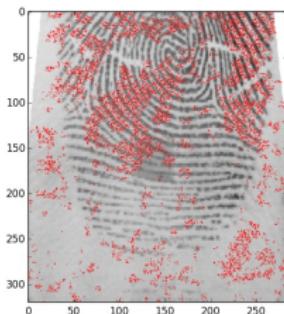
(b) Watershed



(c) Direção watershed



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



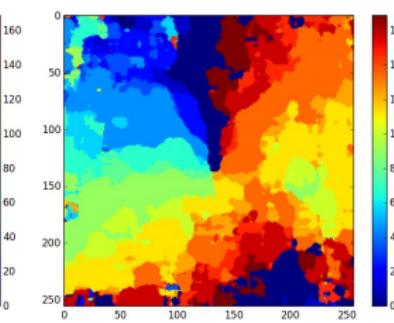
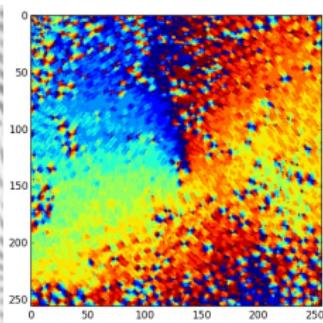
(e) Marcadores



(a) Original



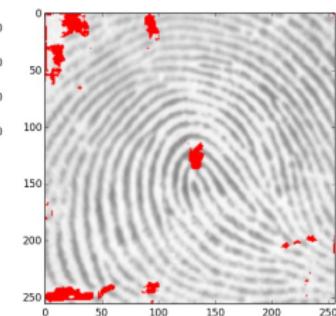
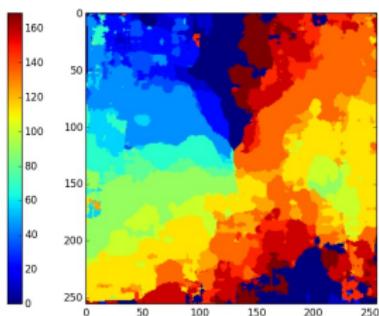
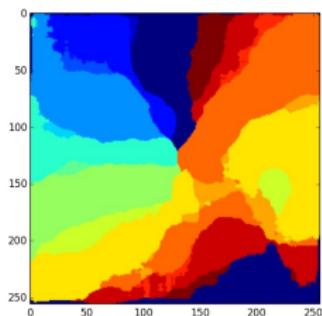
(b) Resultado final



(a) Original

(b) Info. Direcional

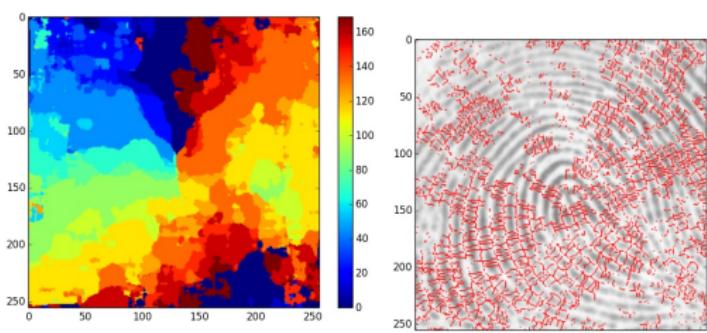
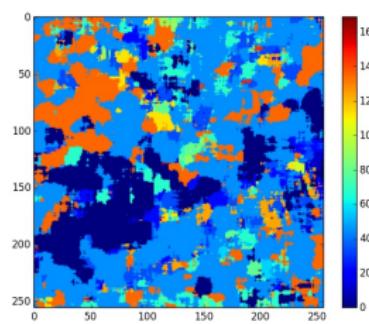
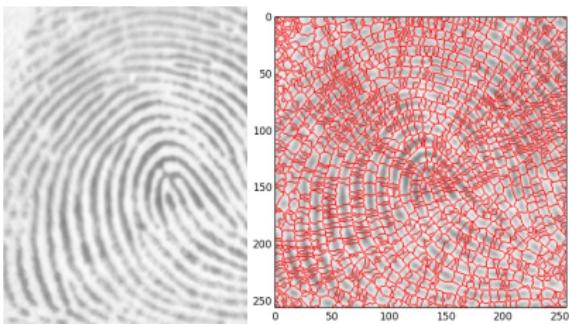
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

(f) Pixels retificados



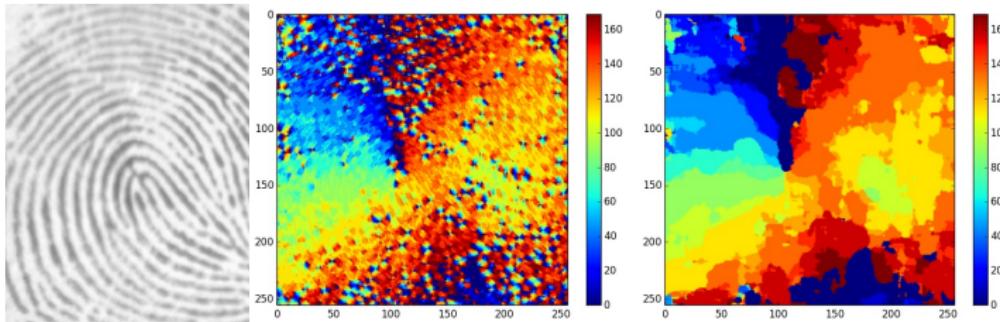
(e) Marcadores



(a) Original



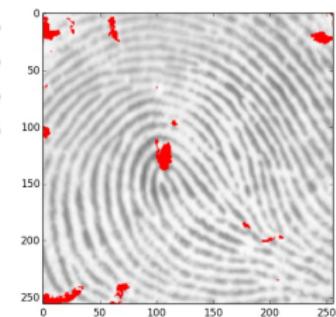
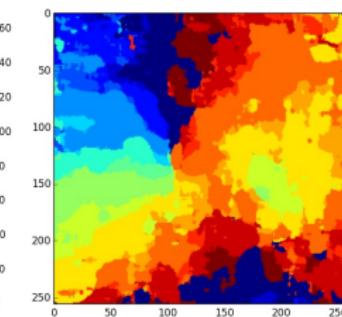
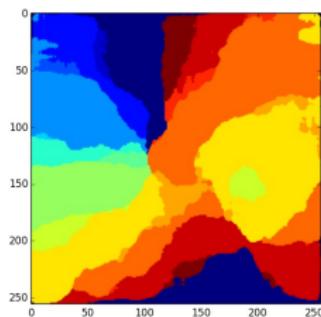
(b) Resultado final



(a) Original

(b) Info. Direcional

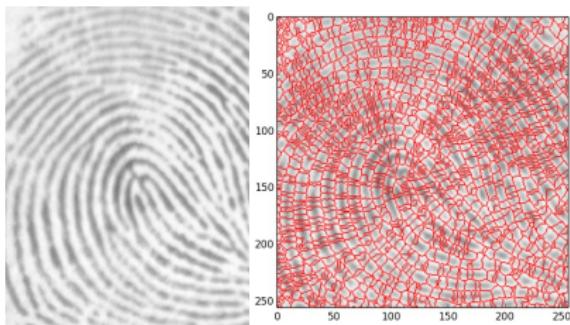
(c) Janela 15x15



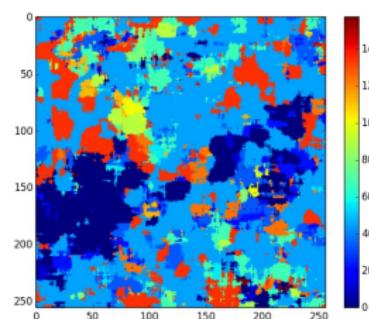
(d) Janela 45x45

(e) Retificado

(f) Pixels retificados

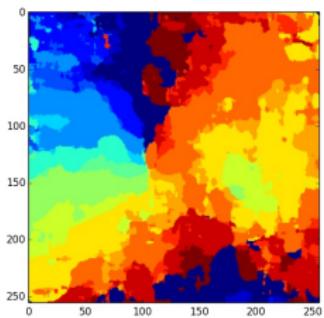


(a) Original

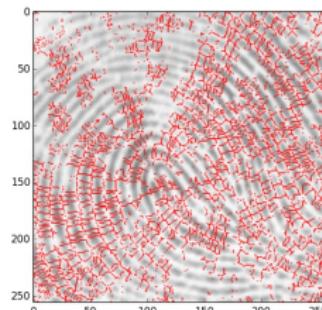


(b) Watershed

(c) Direção watershed



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



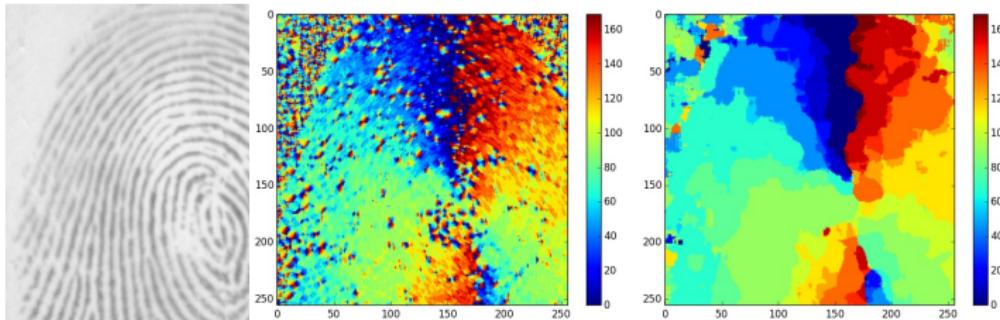
(e) Marcadores



(a) Original



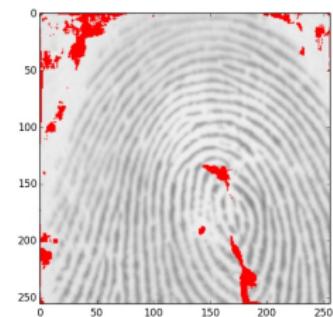
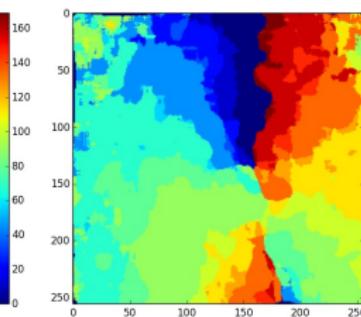
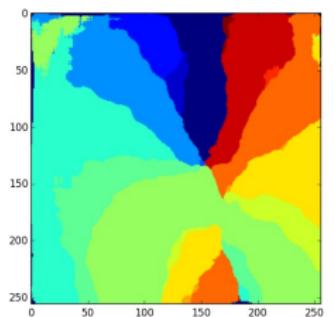
(b) Resultado final



(a) Original

(b) Info. Direcional

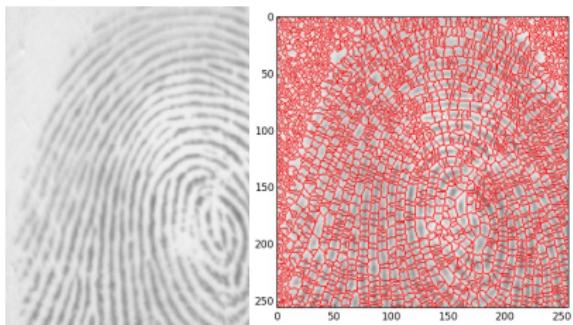
(c) Janela 15x15



(d) Janela 45x45

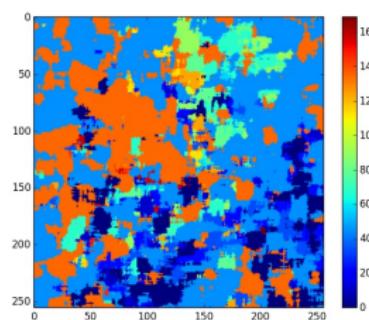
(e) Retificado

(f) Pixels retificados

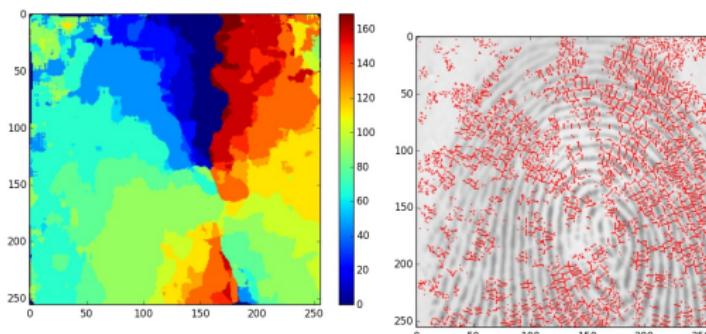


(a) Original

(b) Watershed



(c) Direção watershed



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

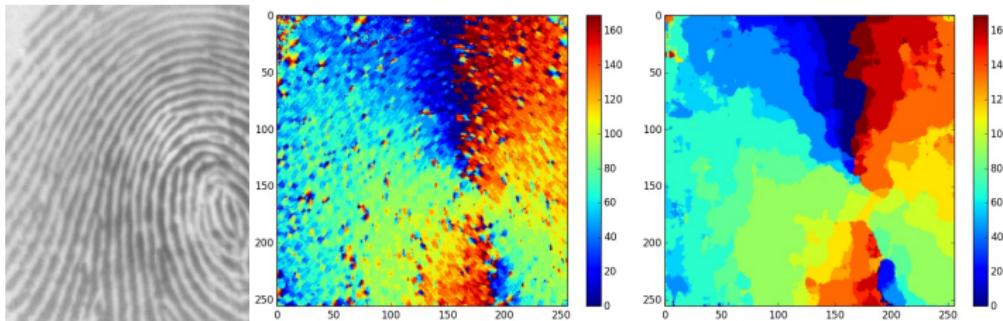
(e) Marcadores



(a) Original



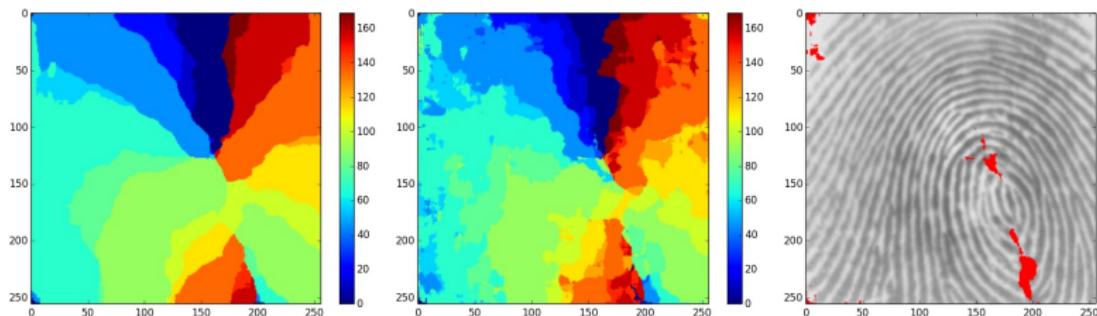
(b) Resultado final



(a) Original

(b) Info. Direcional

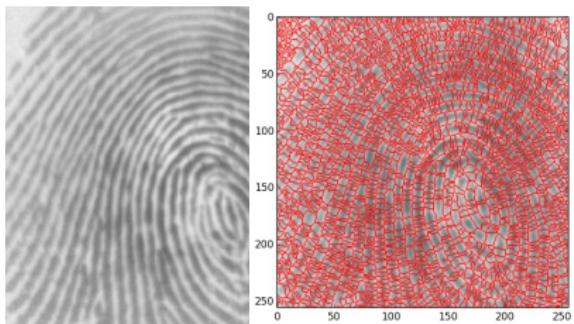
(c) Janela 15x15



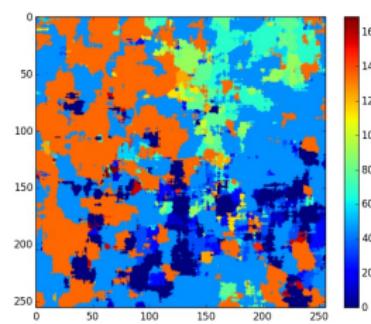
(d) Janela 45x45

(e) Retificado

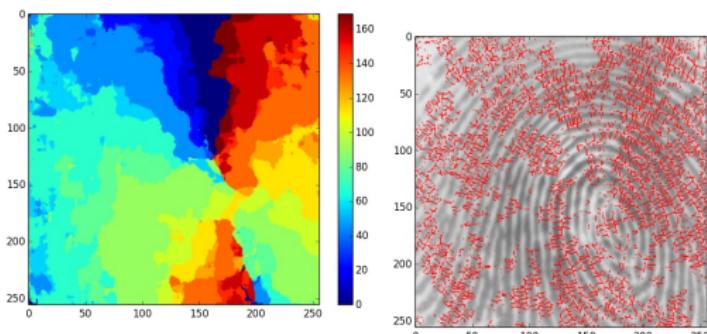
(f) Pixels retificados



(a) Original



(c) Direção watershed



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

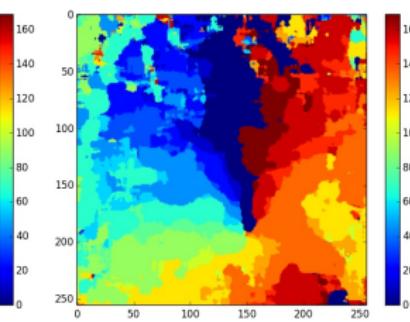
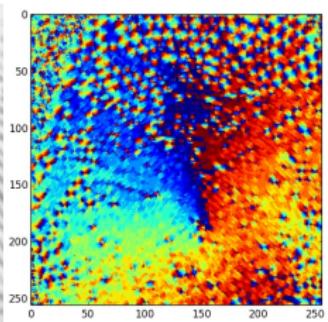
(e) Marcadores



(a) Original



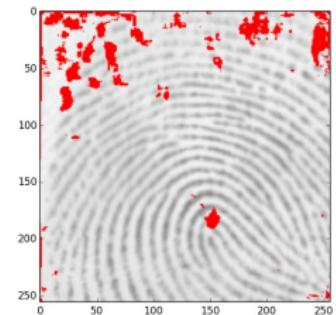
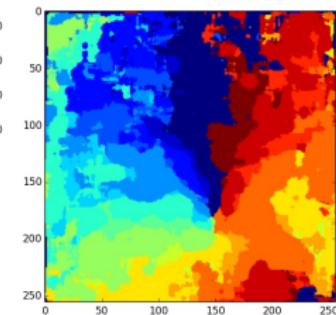
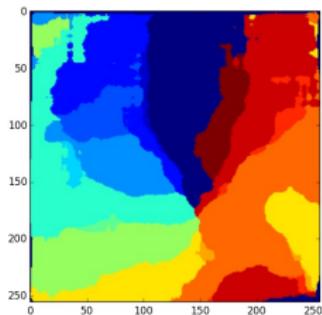
(b) Resultado final



(a) Original

(b) Info. Direcional

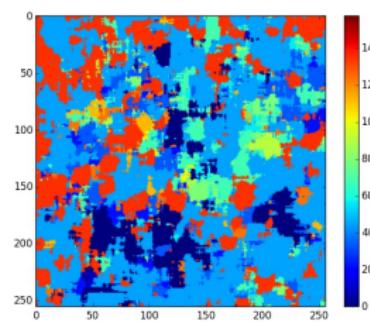
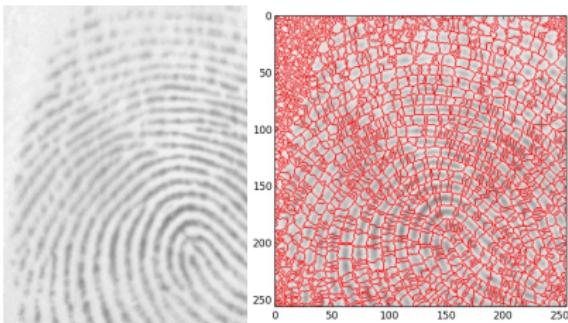
(c) Janela 15x15



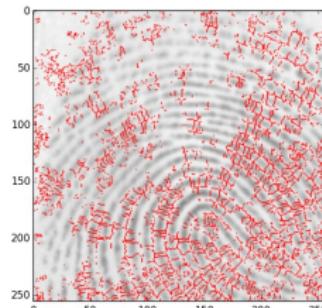
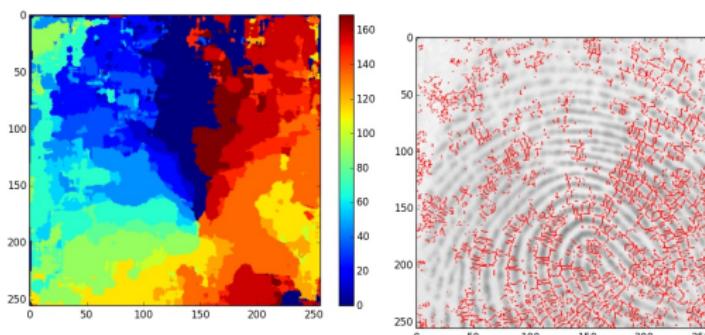
(d) Janela 45x45

(e) Retificado

(f) Pixels retificados



(c) Direção watershed

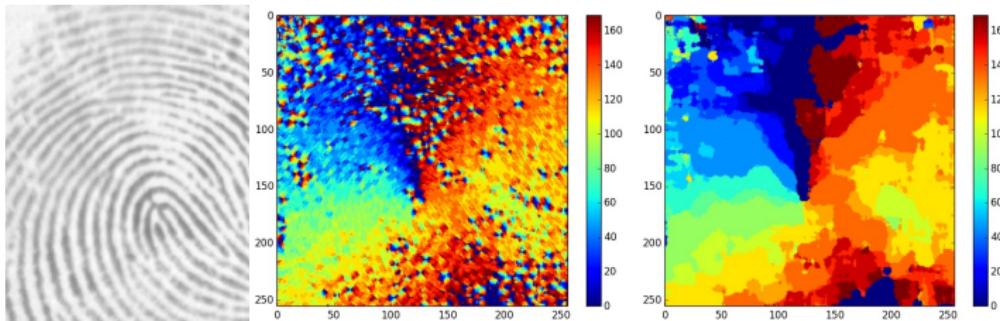




(a) Original



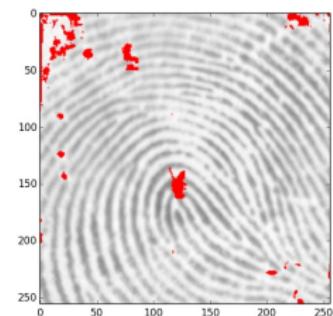
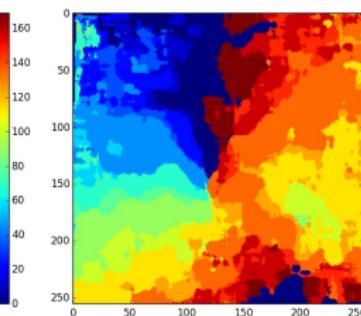
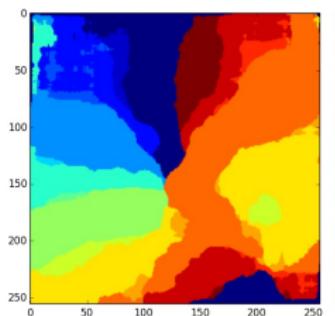
(b) Resultado final



(a) Original

(b) Info. Direcional

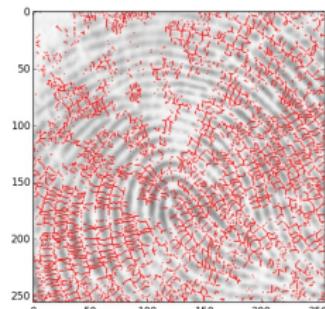
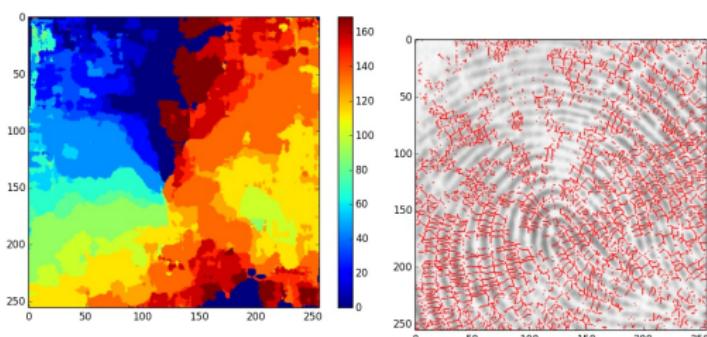
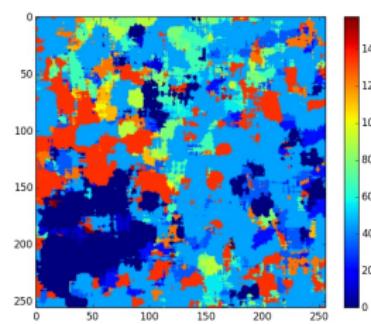
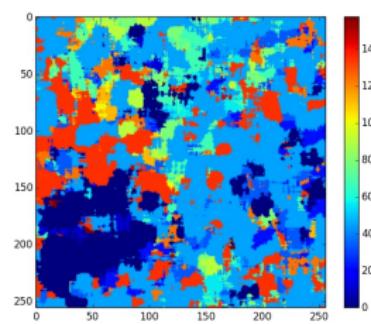
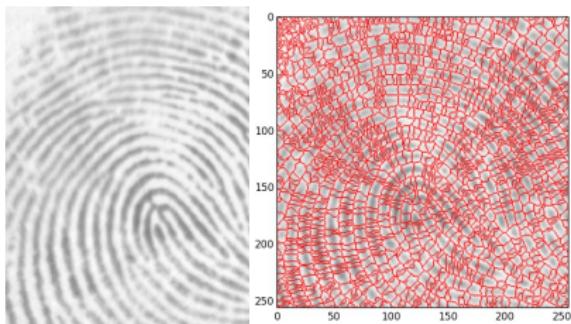
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

(f) Pixels retificados

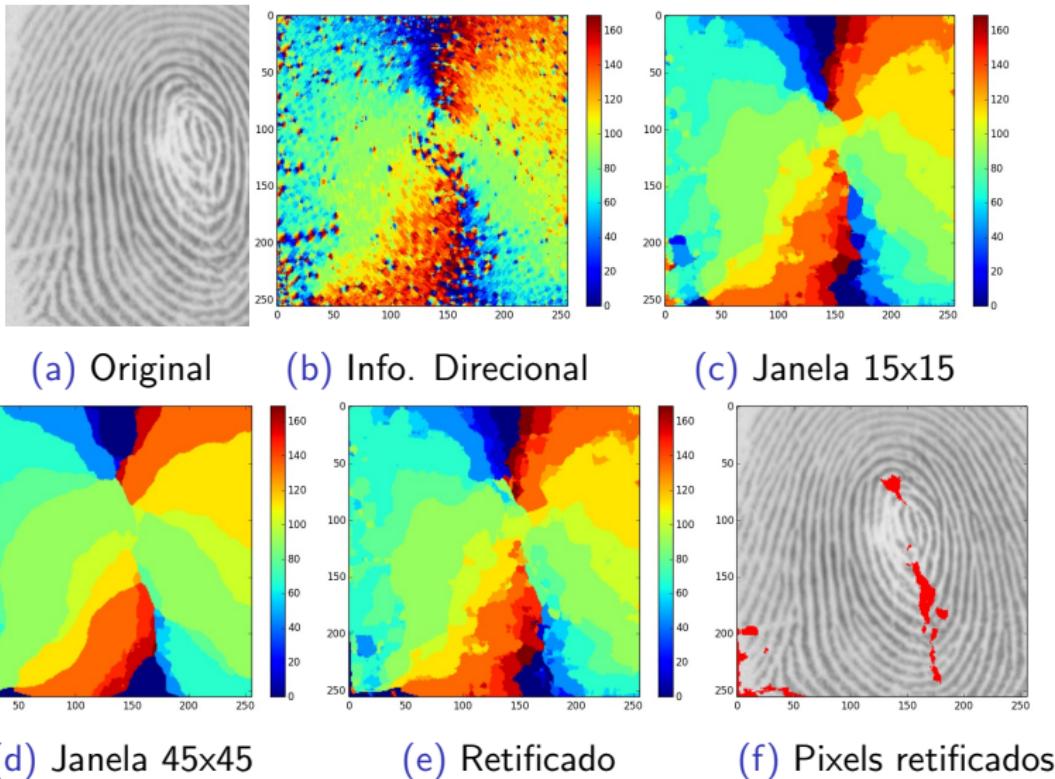


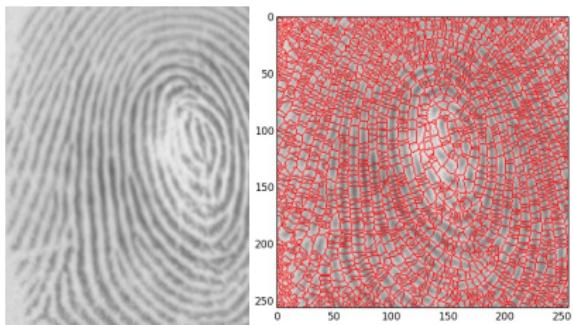


(a) Original



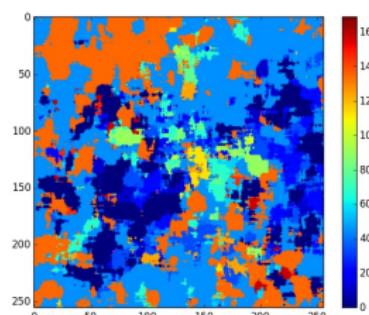
(b) Resultado final



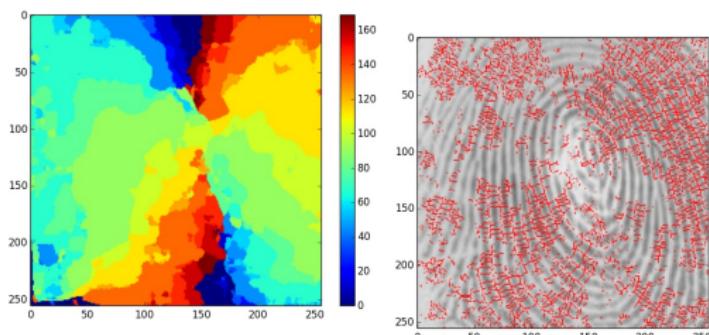


(a) Original

(b) Watershed



(c) Direção watershed



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

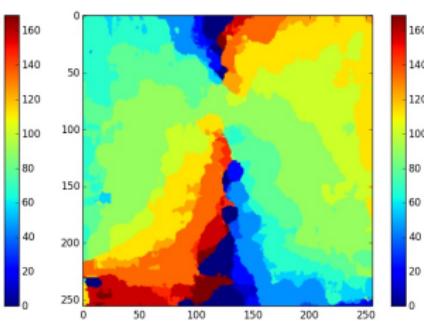
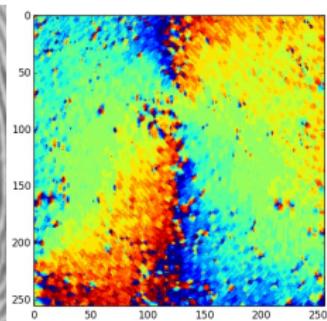
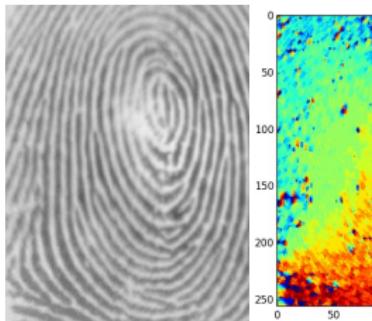
(e) Marcadores



(a) Original



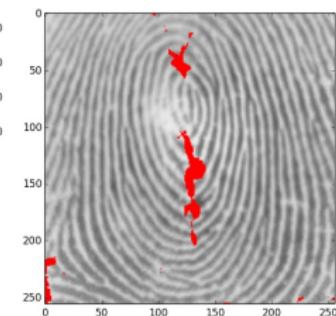
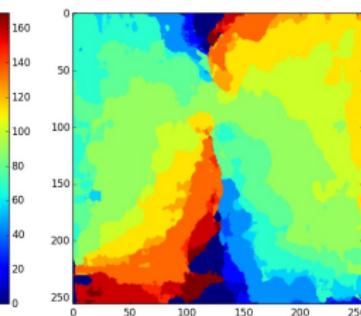
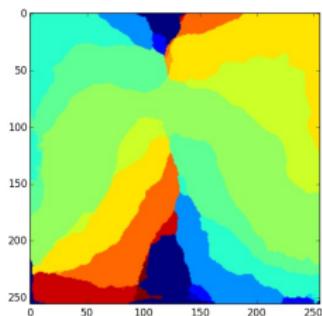
(b) Resultado final



(a) Original

(b) Info. Direcional

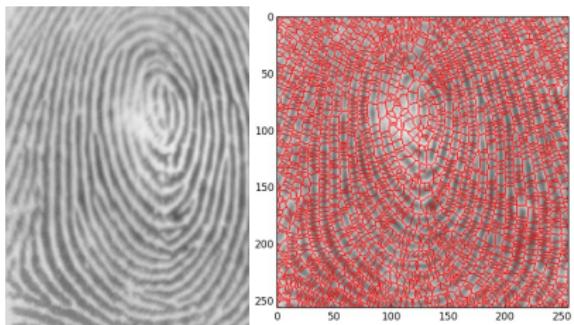
(c) Janela 15x15



(d) Janela 45x45

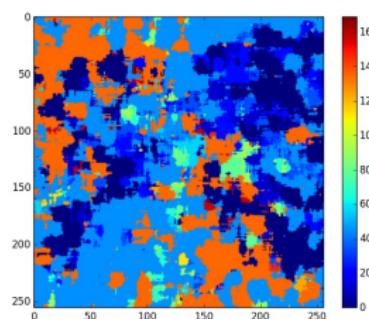
(e) Retificado

(f) Pixels retificados

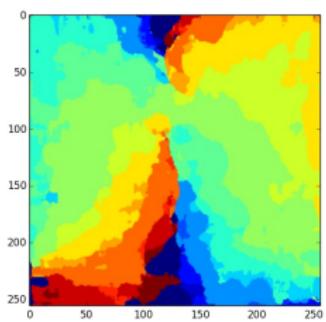


(a) Original

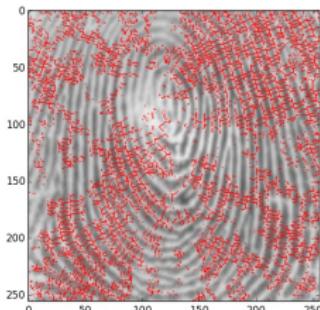
(b) Watershed



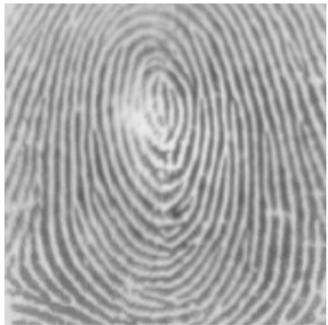
(c) Direção watershed



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



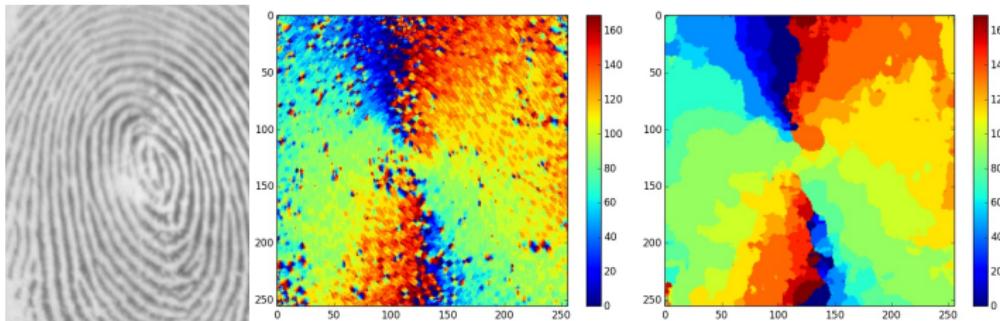
(e) Marcadores



(a) Original



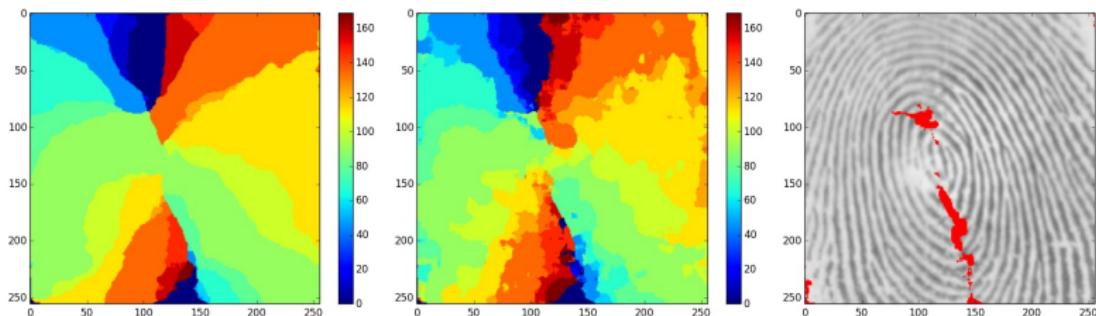
(b) Resultado final



(a) Original

(b) Info. Direcional

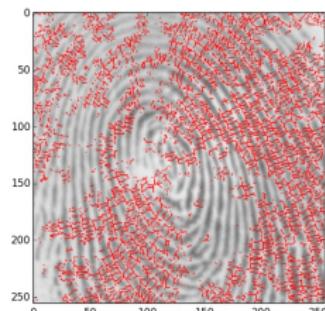
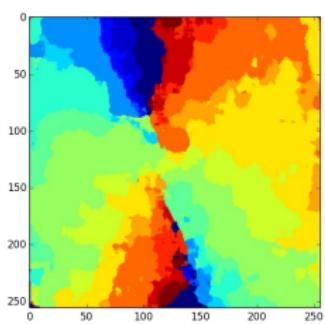
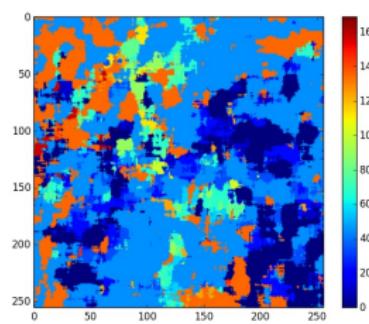
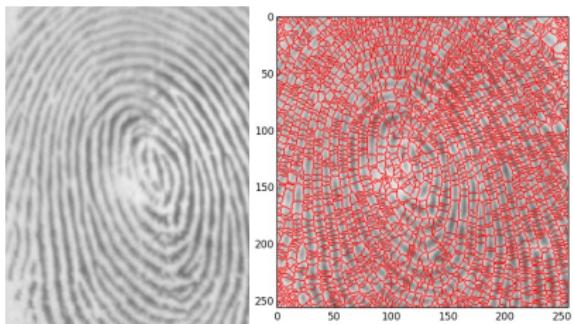
(c) Janela 15x15

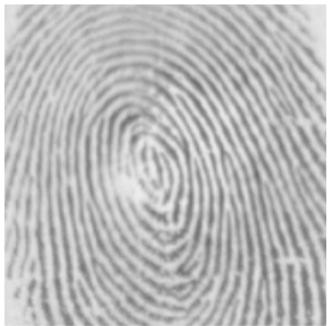


(d) Janela 45x45

(e) Retificado

(f) Pixels retificados

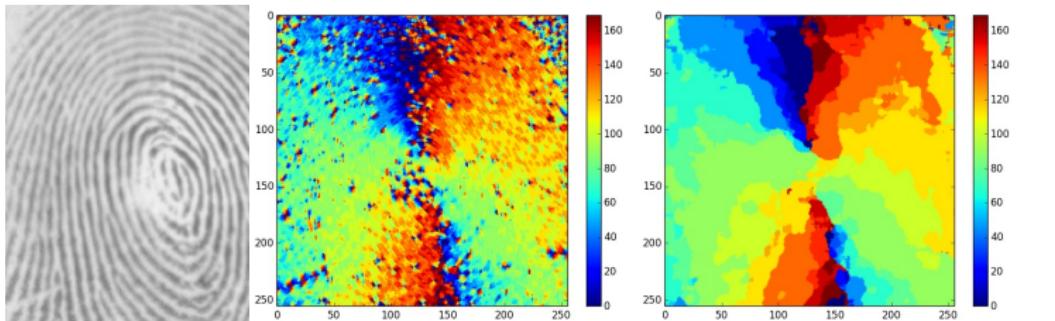




(a) Original



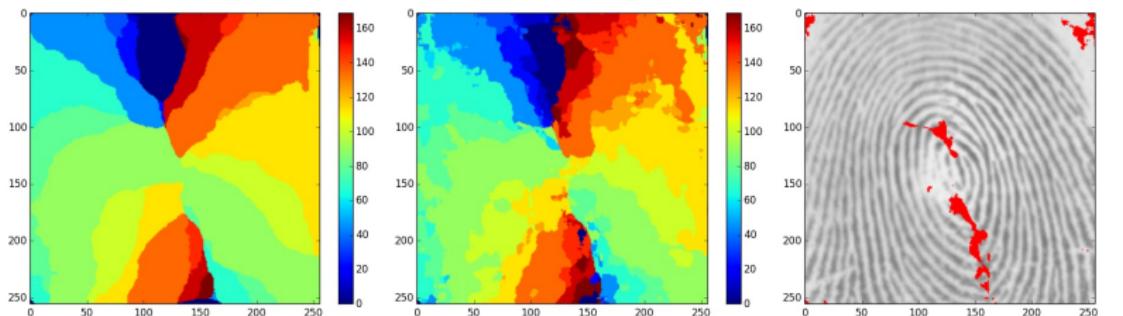
(b) Resultado final



(a) Original

(b) Info. Direcional

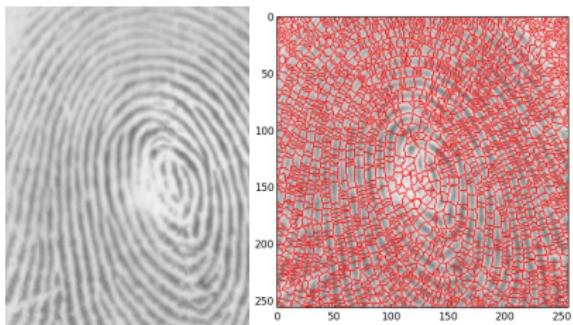
(c) Janela 15x15



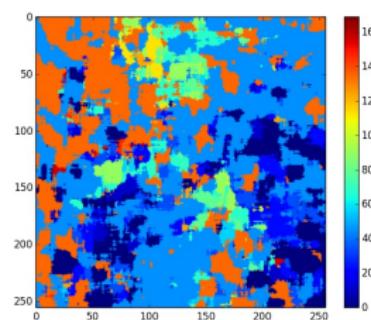
(d) Janela 45x45

(e) Retificado

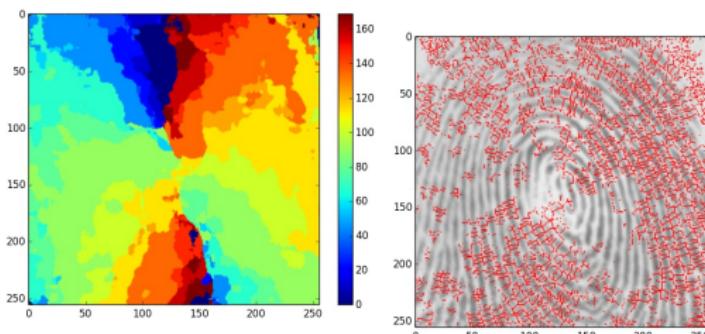
(f) Pixels retificados



(a) Original



(b) Watershed



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

(c) Direção watershed

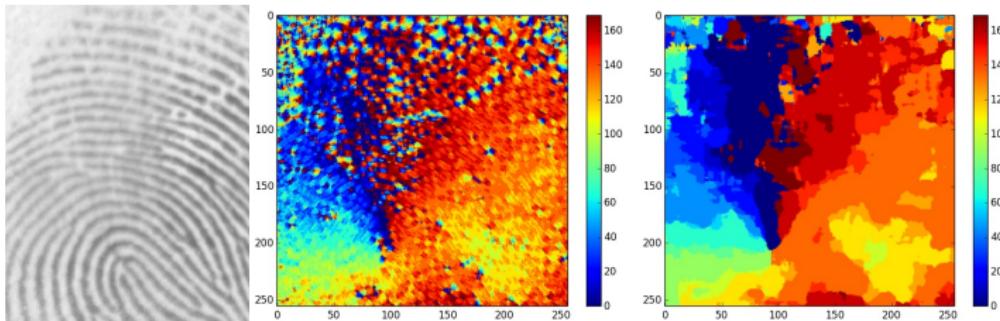
(e) Marcadores



(a) Original



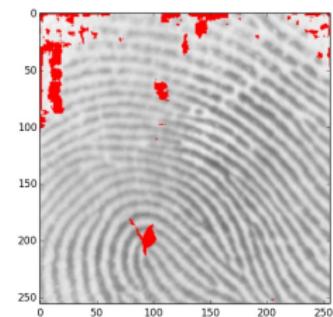
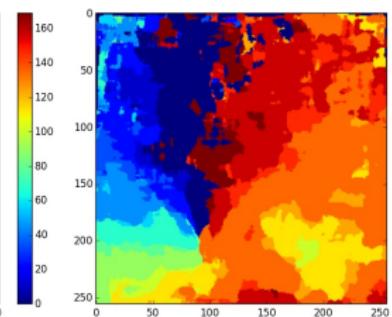
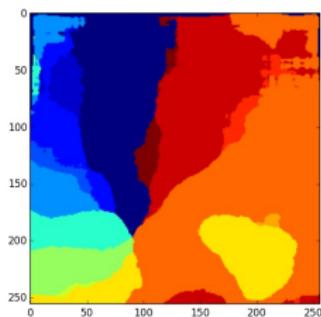
(b) Resultado final



(a) Original

(b) Info. Direcional

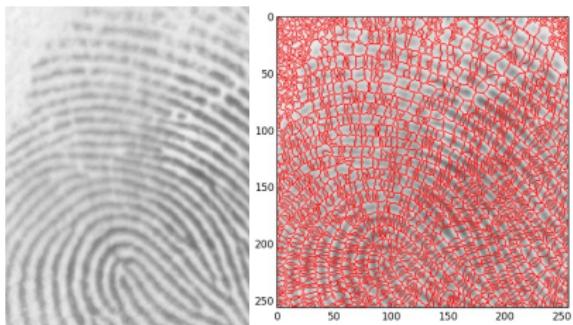
(c) Janela 15x15



(d) Janela 45x45

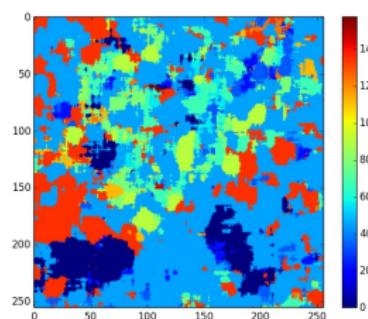
(e) Retificado

(f) Pixels retificados

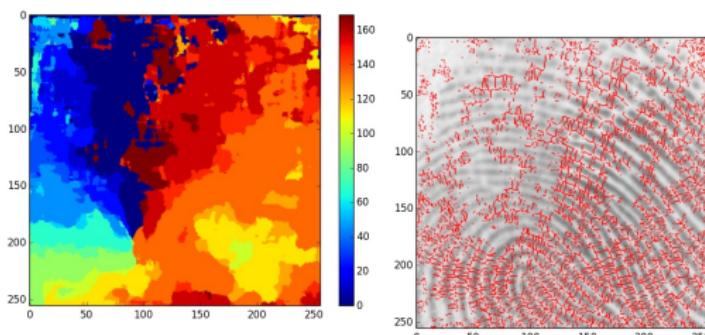


(a) Original

(b) Watershed



(c) Direção watershed



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

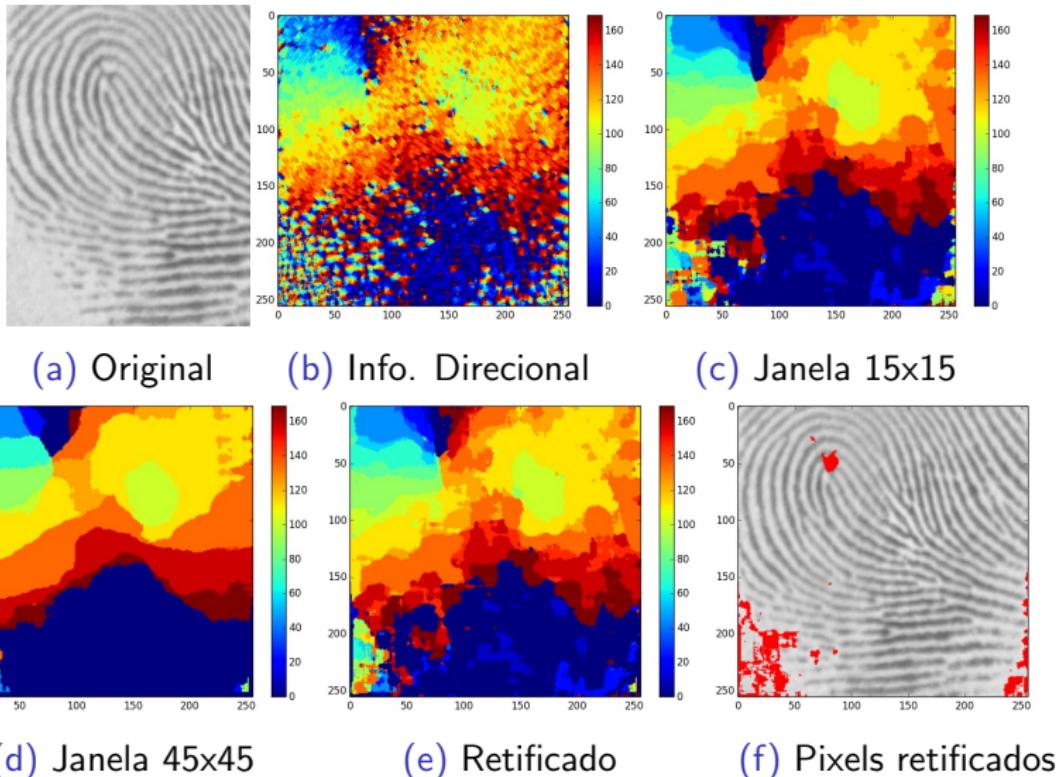
(e) Marcadores

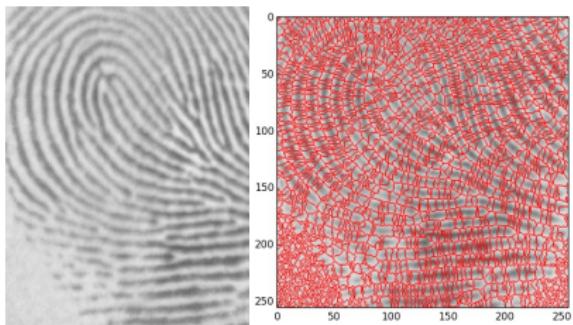


(a) Original



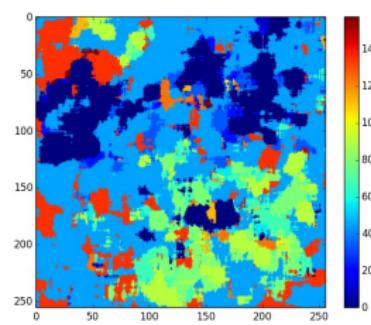
(b) Resultado final



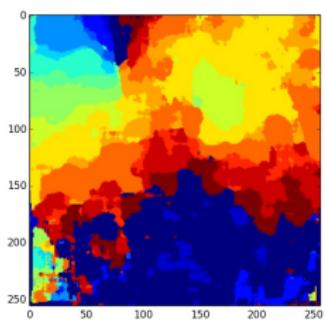


(a) Original

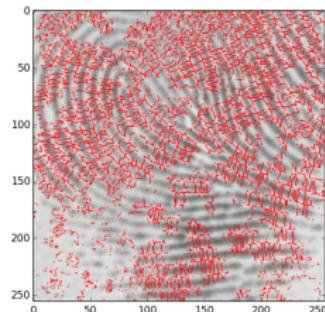
(b) Watershed



(c) Direção watershed



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



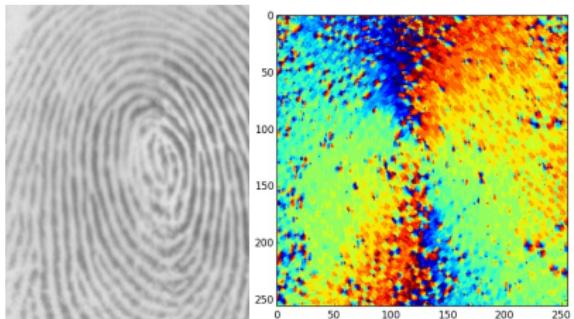
(e) Marcadores



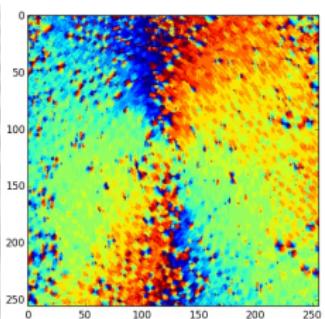
(a) Original



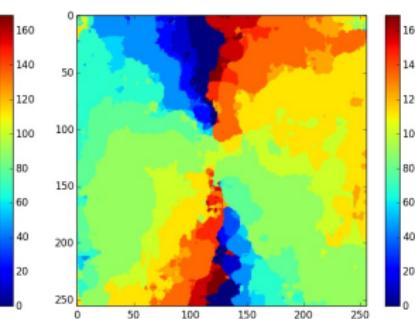
(b) Resultado final



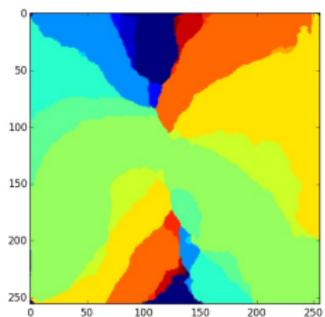
(a) Original



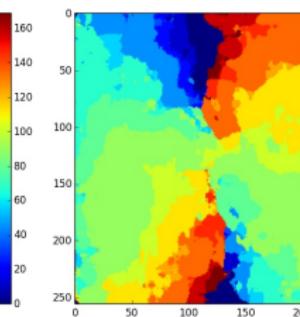
(b) Info. Direcional



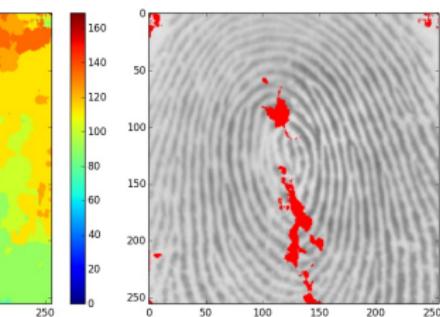
(c) Janela 15x15



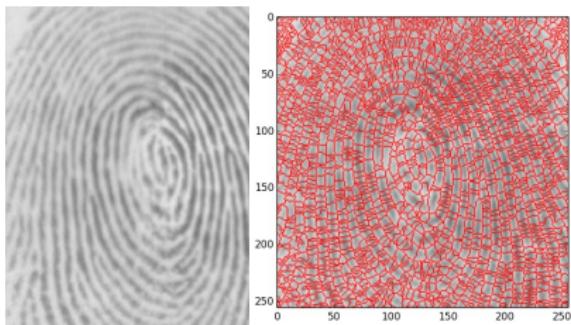
(d) Janela 45x45



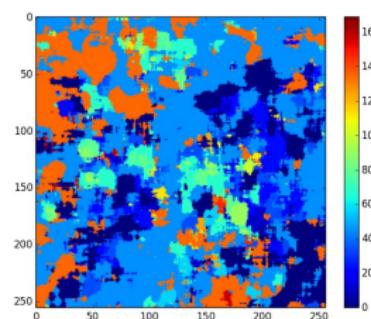
(e) Retificado



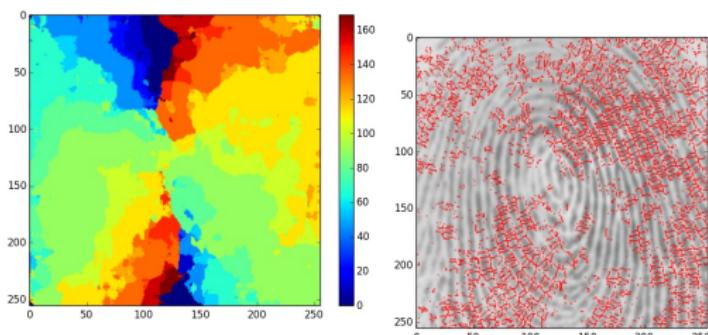
(f) Pixels retificados



(a) Original

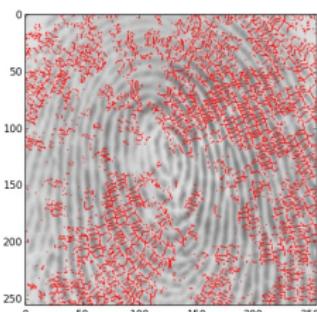


(b) Watershed

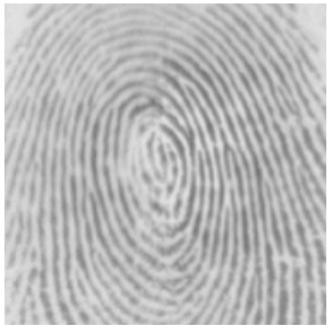


(d) Info. Direcional
retificada (fig. original)

(c) Direção watershed



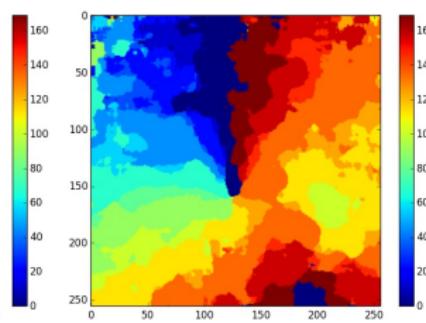
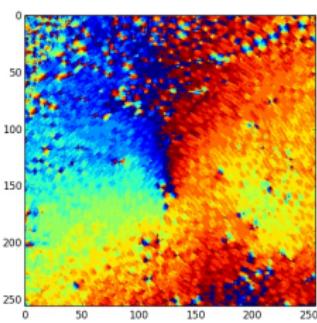
(e) Marcadores



(a) Original



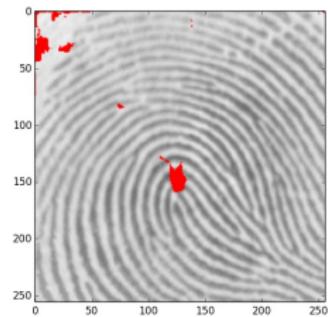
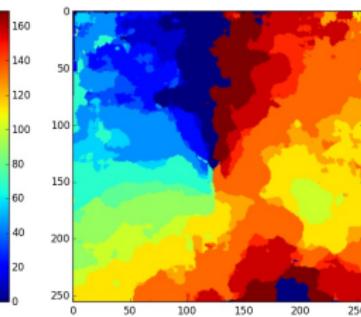
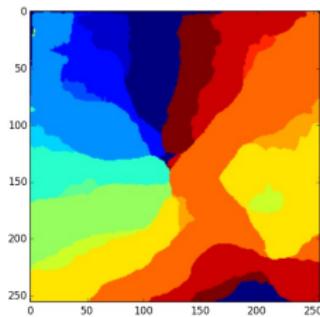
(b) Resultado final



(a) Original

(b) Info. Direcional

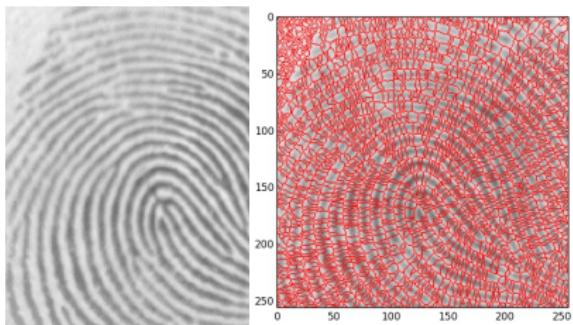
(c) Janela 15x15



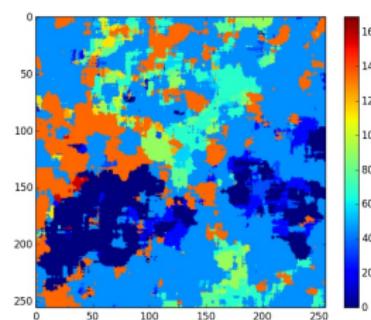
(d) Janela 45x45

(e) Retificado

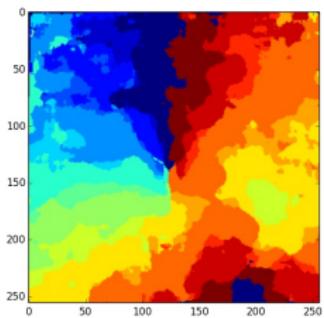
(f) Pixels retificados



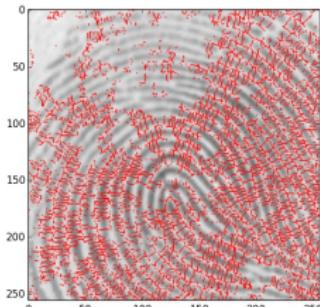
(a) Original



(c) Direção watershed



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



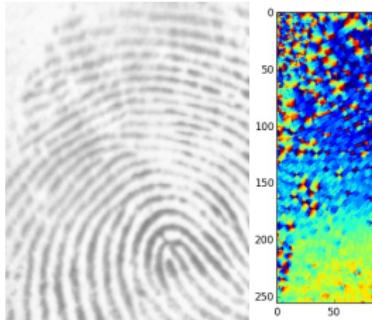
(e) Marcadores



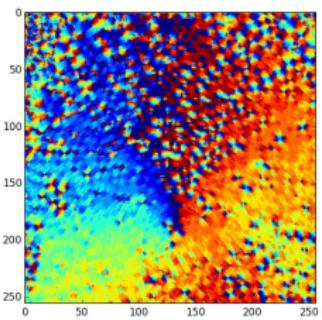
(a) Original



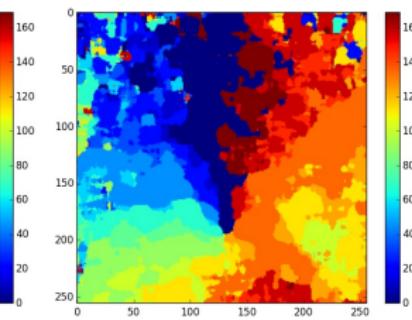
(b) Resultado final



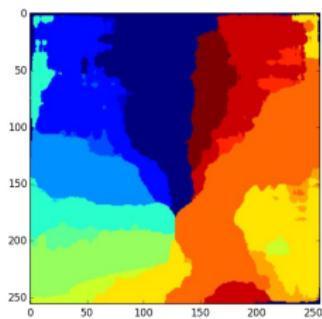
(a) Original



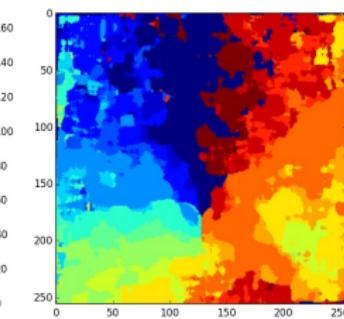
(b) Info. Direcional



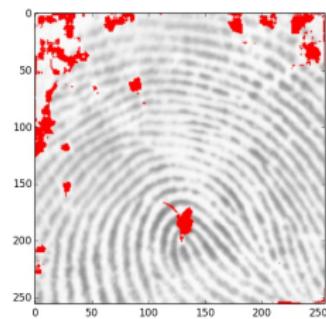
(c) Janela 15x15



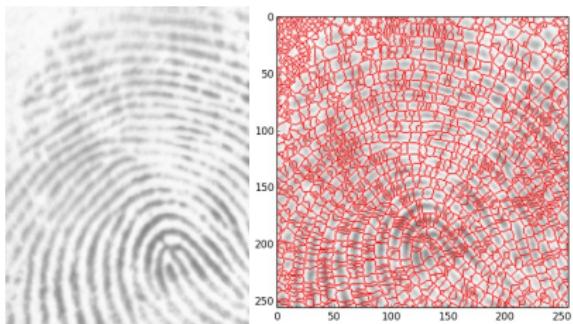
(d) Janela 45x45



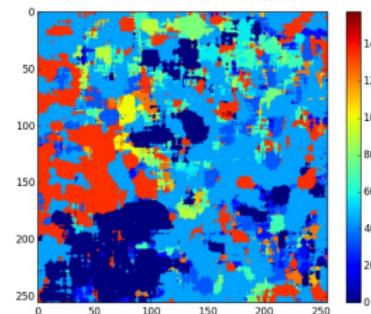
(e) Retificado



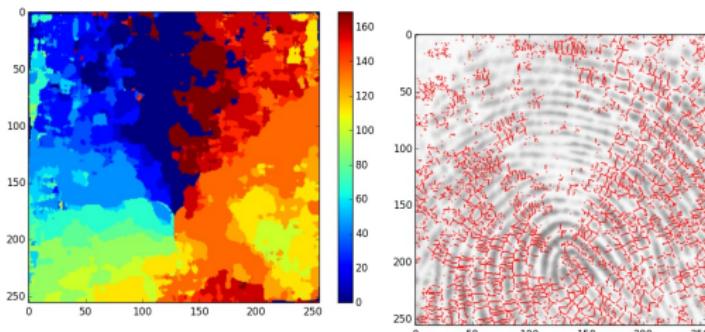
(f) Pixels retificados



(a) Original



(c) Direção watershed



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

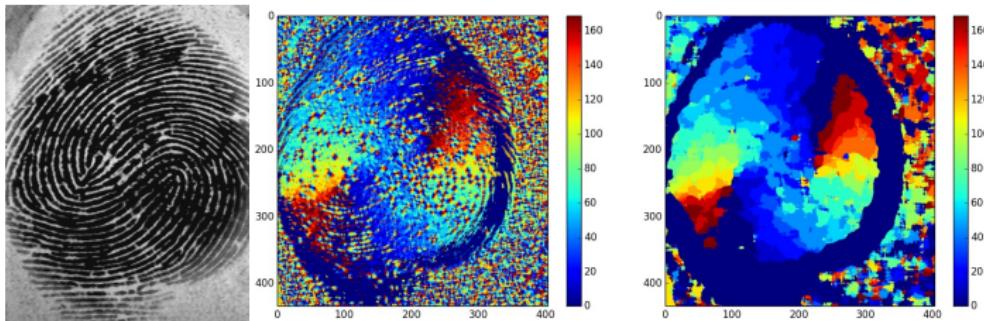
(e) Marcadores



(a) Original



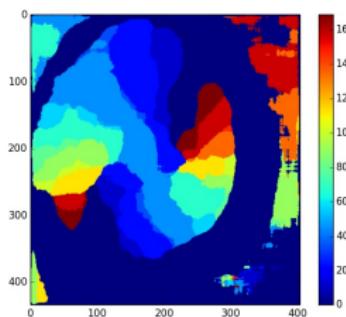
(b) Resultado final



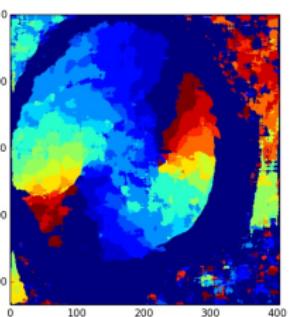
(a) Original

(b) Info. Direcional

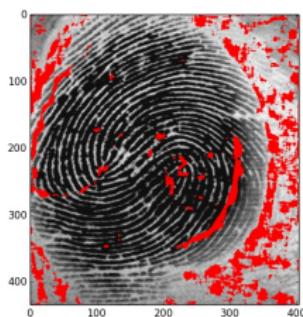
(c) Janela 15x15



(d) Janela 45x45



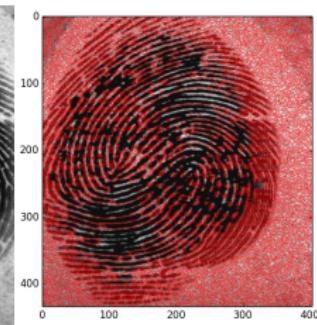
(e) Retificado



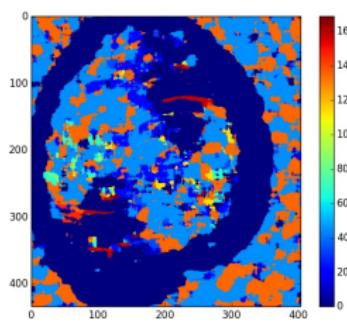
(f) Pixels retificados



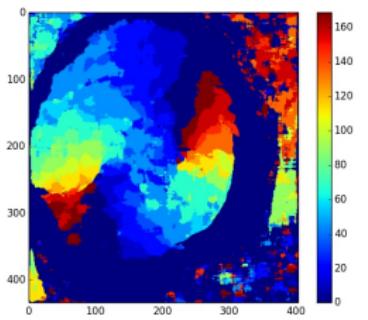
(a) Original



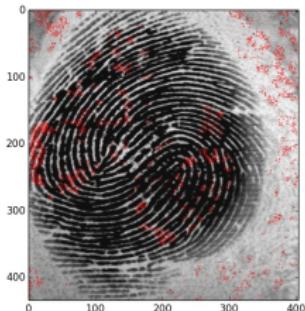
(b) Watershed



(c) Direção watershed



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



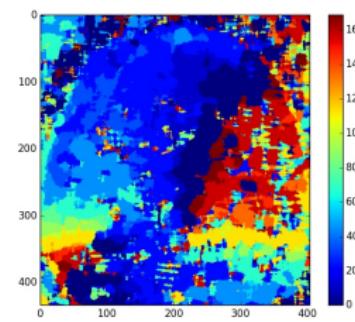
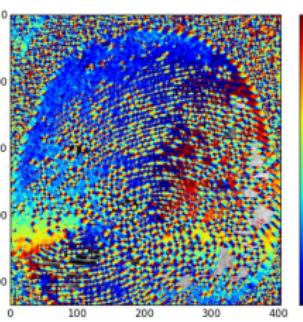
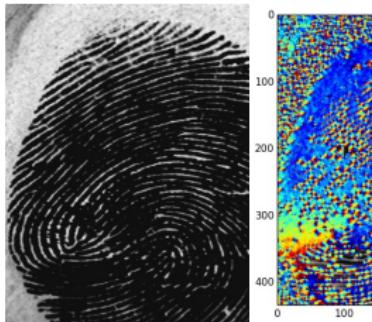
(e) Marcadores



(a) Original



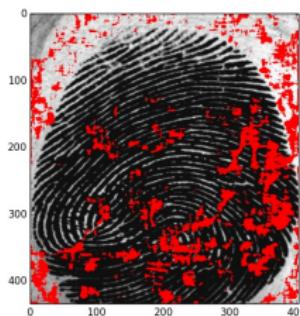
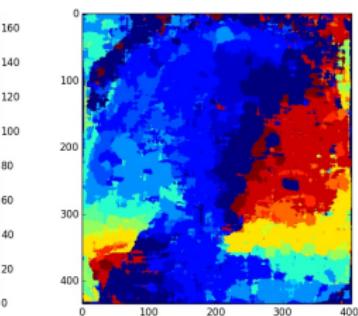
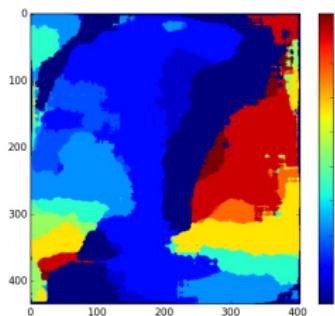
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



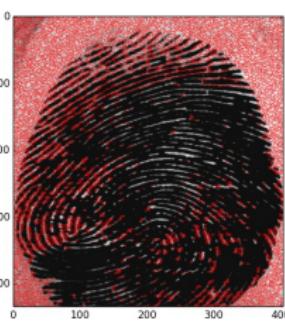
(d) Janela 45x45

(e) Retificado

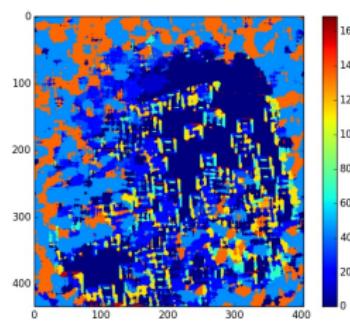
(f) Pixels retificados



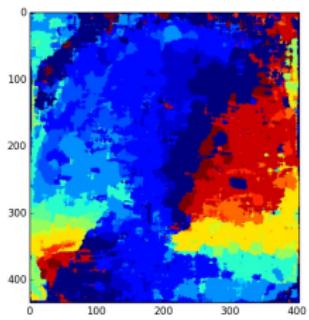
(a) Original



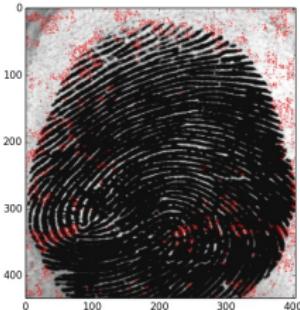
(b) Watershed



(c) Direção watershed



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



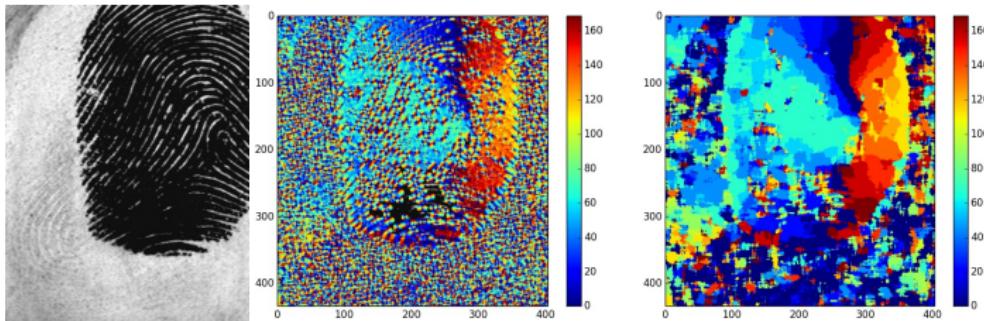
(e) Marcadores



(a) Original



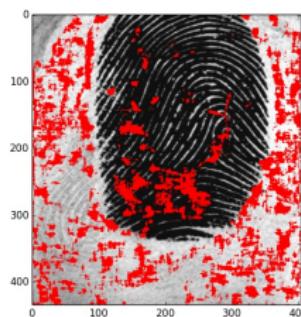
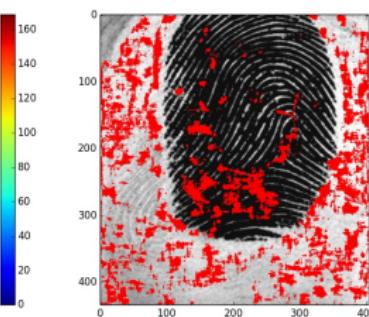
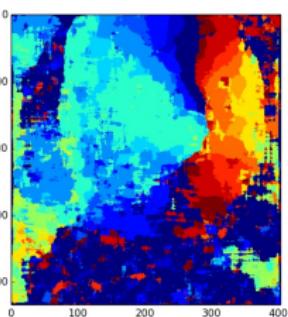
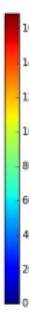
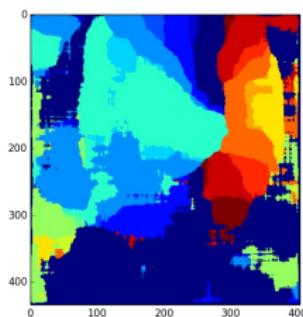
(b) Resultado final

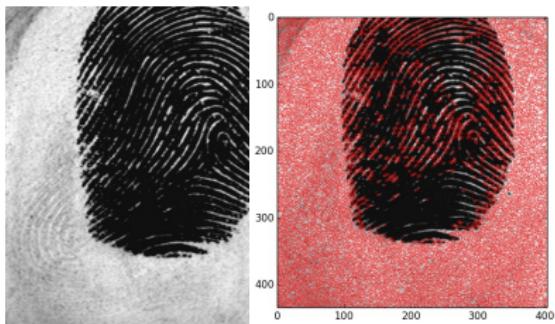


(a) Original

(b) Info. Direcional

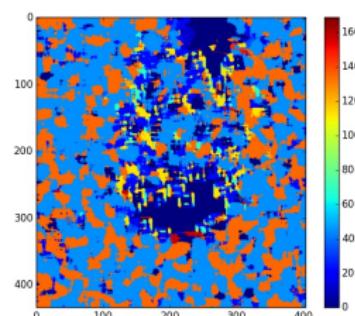
(c) Janela 15x15



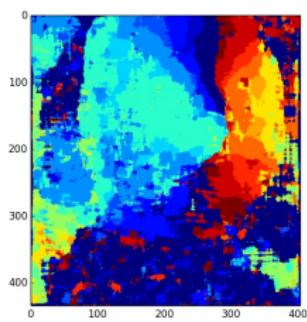


(a) Original

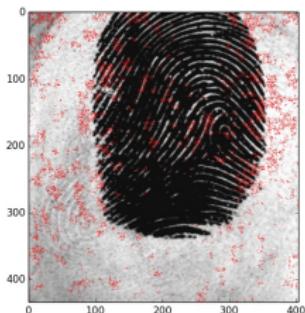
(b) Watershed



(c) Direção watershed



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



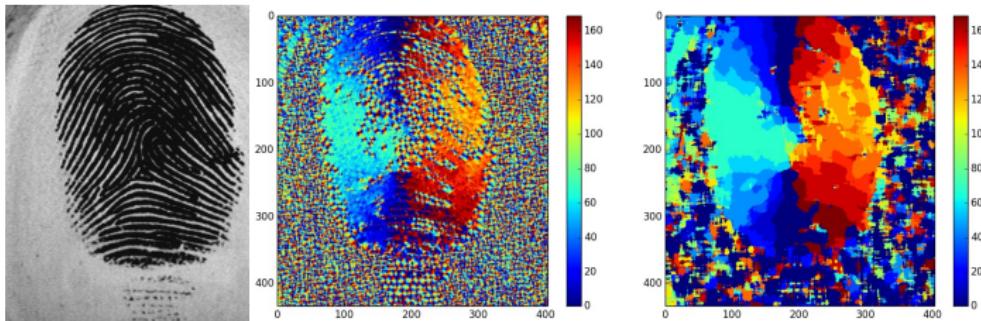
(e) Marcadores



(a) Original



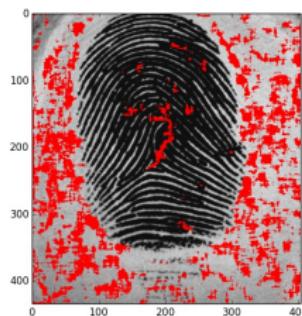
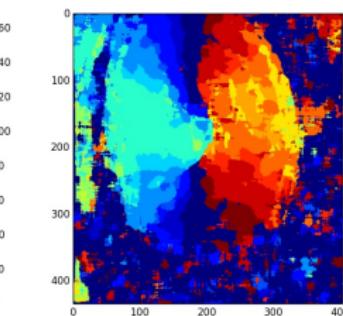
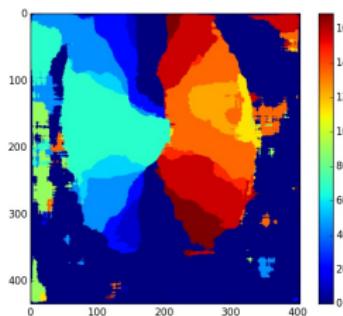
(b) Resultado final



(a) Original

(b) Info. Direcional

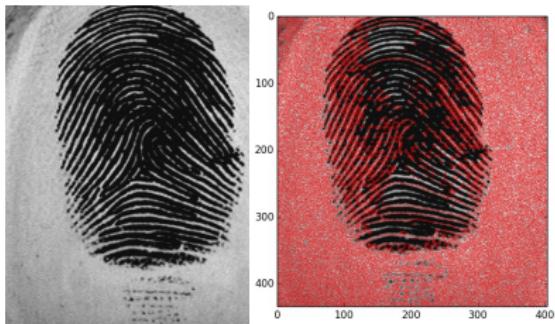
(c) Janela 15x15



(d) Janela 45x45

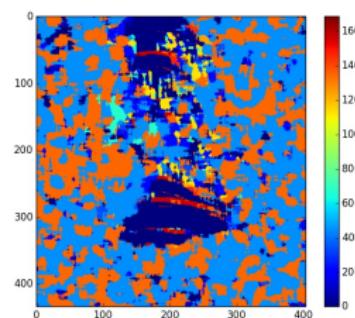
(e) Retificado

(f) Pixels retificados

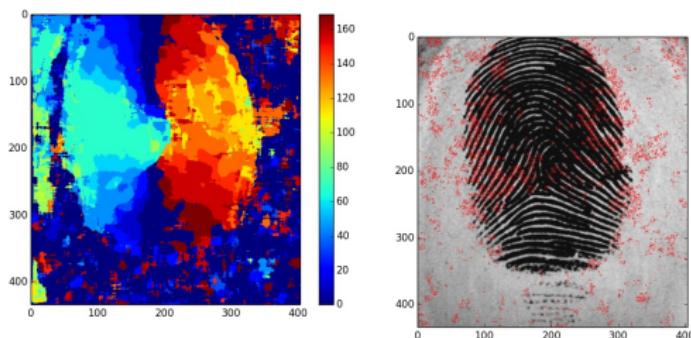


(a) Original

(b) Watershed



(c) Direção watershed



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

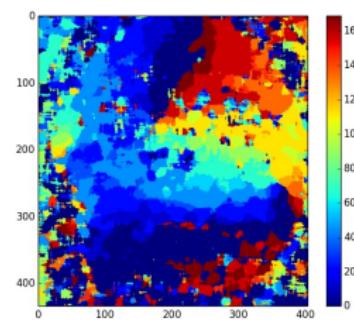
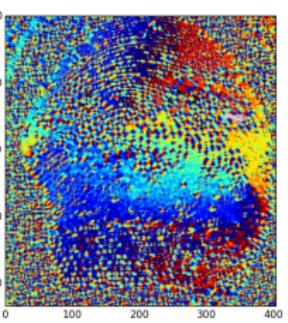
(e) Marcadores



(a) Original



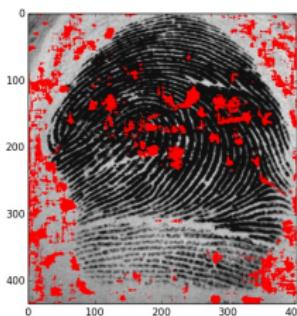
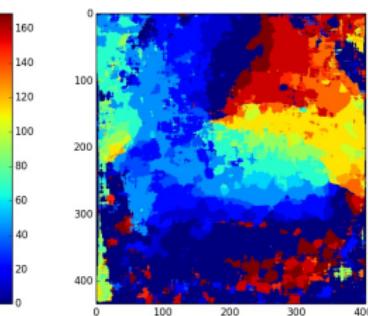
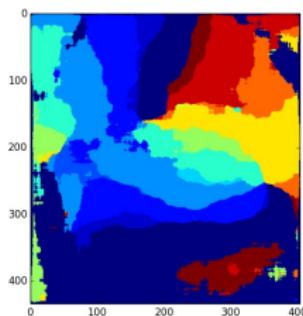
(b) Resultado final



(a) Original

(b) Info. Direcional

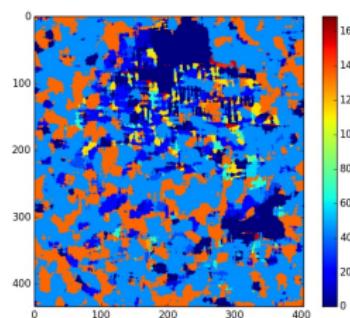
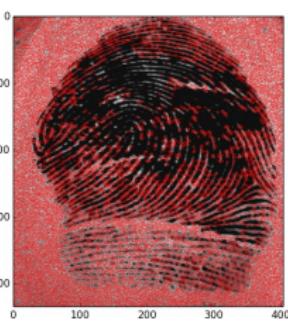
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

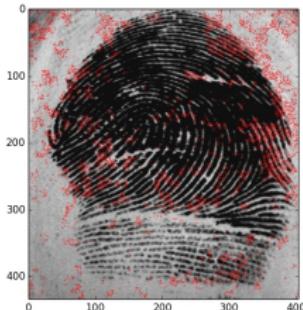
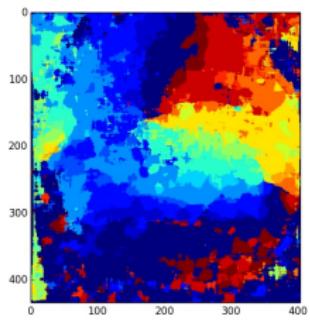
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



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

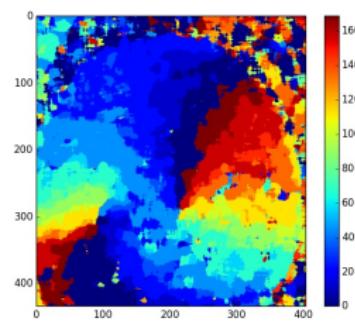
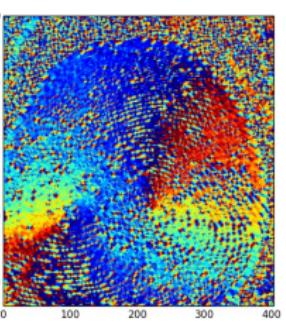
(e) Marcadores



(a) Original



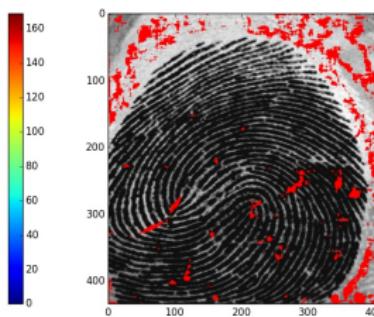
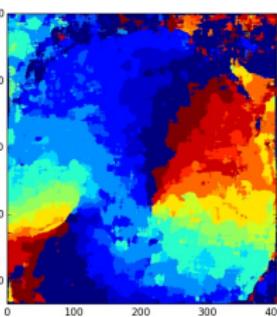
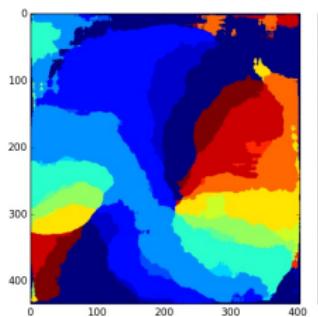
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



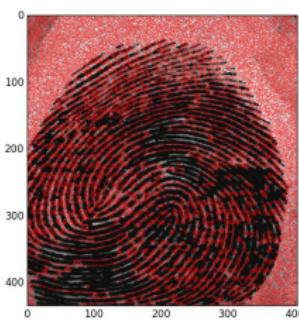
(d) Janela 45x45

(e) Retificado

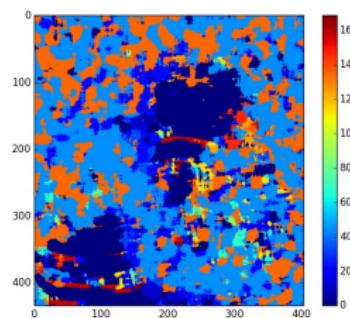
(f) Pixels retificados



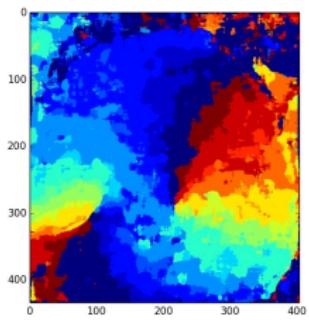
(a) Original



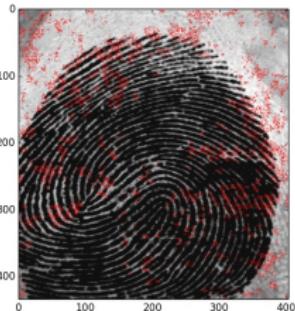
(b) Watershed



(c) Direção watershed



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



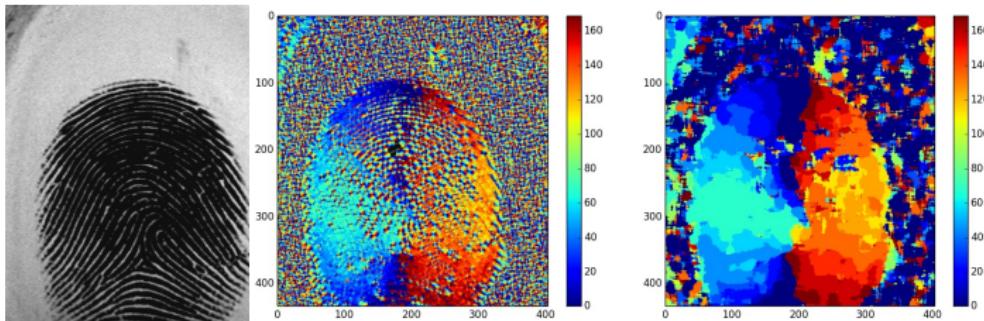
(e) Marcadores



(a) Original



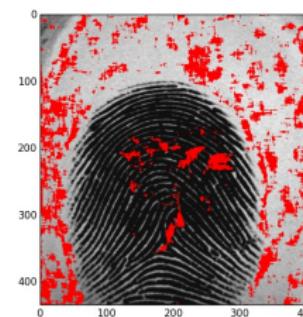
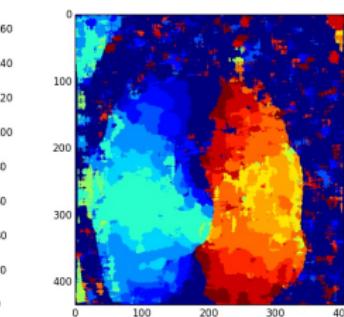
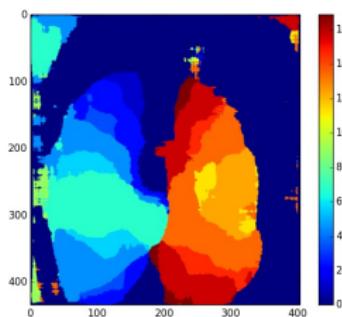
(b) Resultado final



(a) Original

(b) Info. Direcional

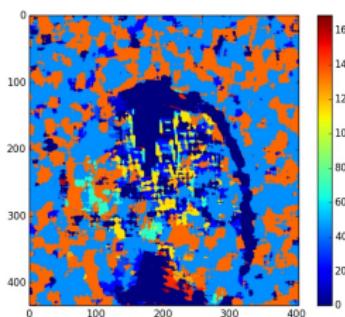
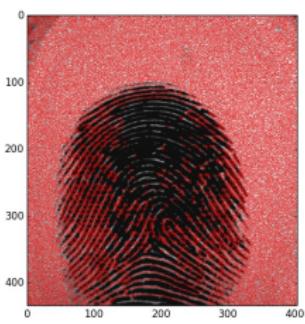
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

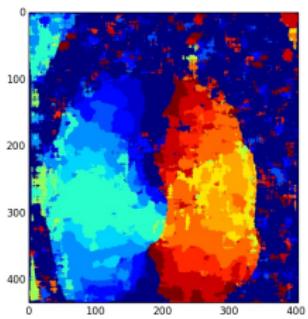
(f) Pixels retificados



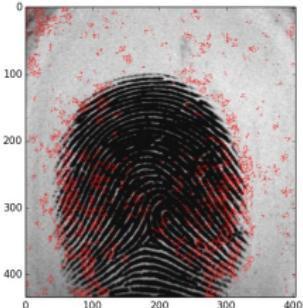
(a) Original

(b) Watershed

(c) Direção watershed



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



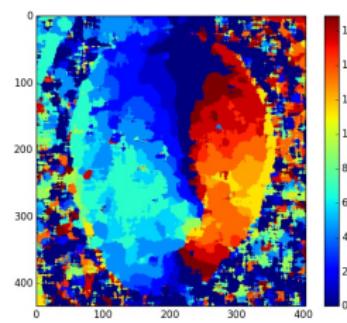
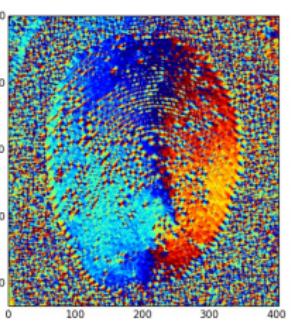
(e) Marcadores



(a) Original



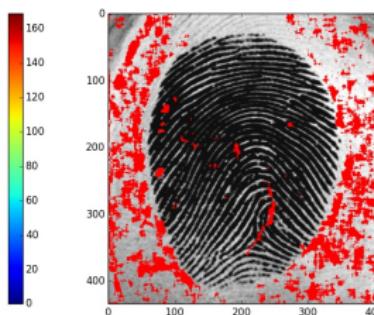
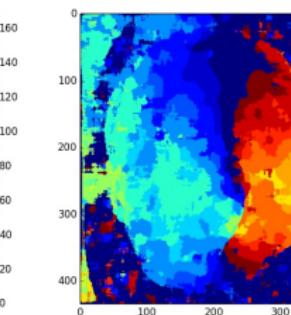
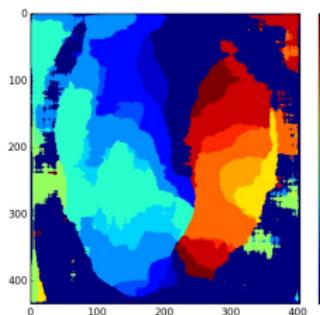
(b) Resultado final



(a) Original

(b) Info. Direcional

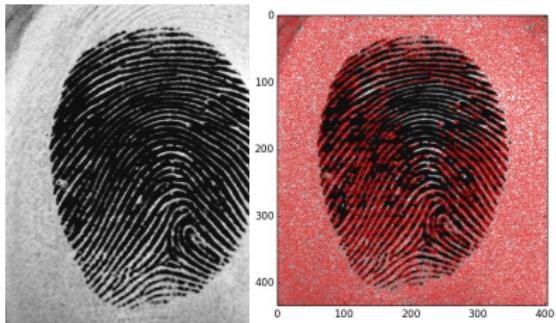
(c) Janela 15x15



(d) Janela 45x45

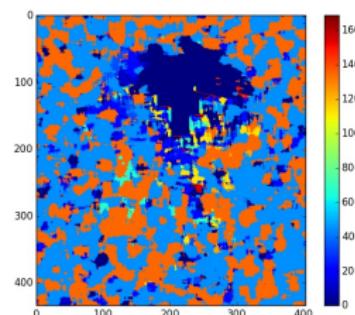
(e) Retificado

(f) Pixels retificados

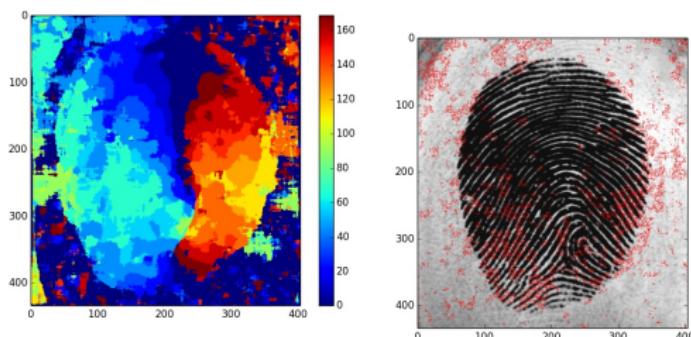


(a) Original

(b) Watershed



(c) Direção watershed



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

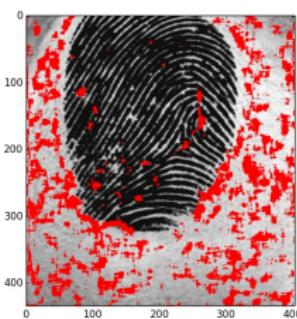
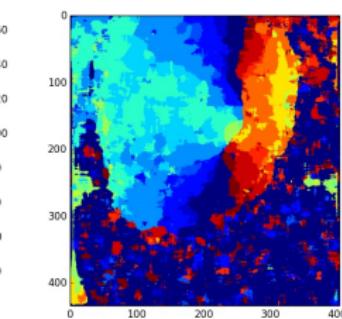
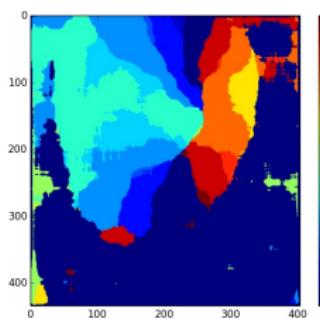
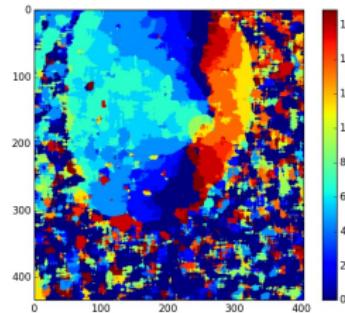
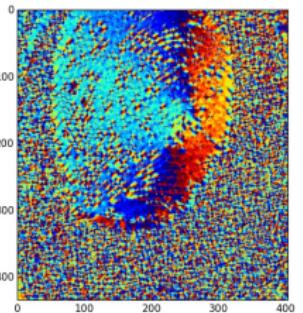
(e) Marcadores



(a) Original

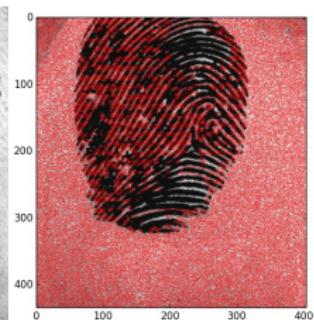


(b) Resultado final

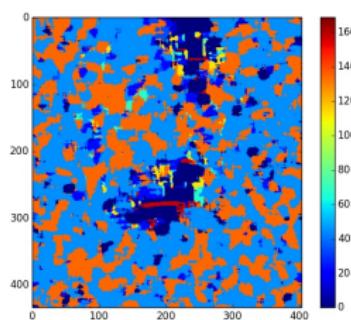




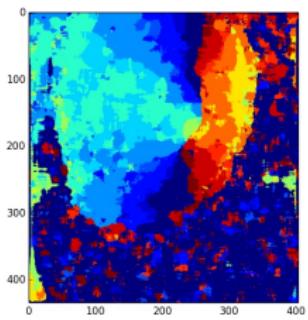
(a) Original



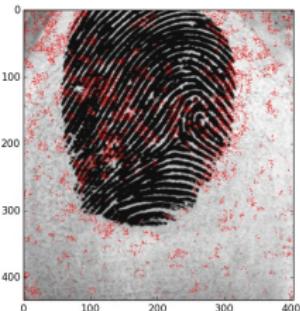
(b) Watershed



(c) Direção watershed



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



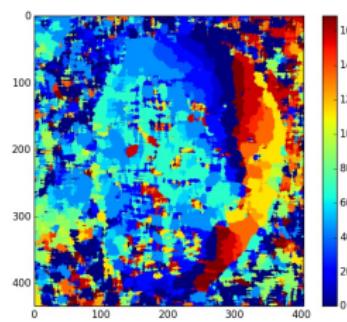
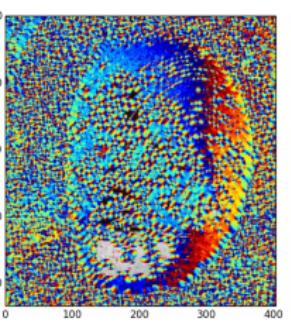
(e) Marcadores



(a) Original



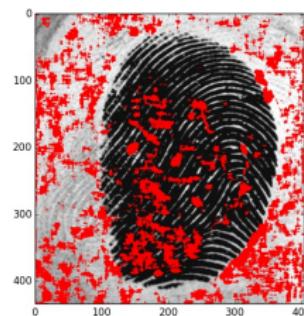
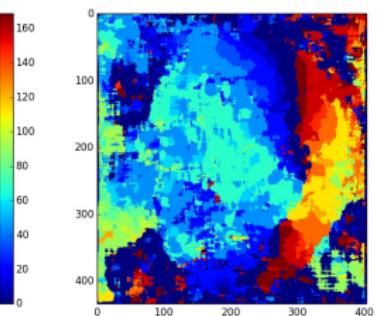
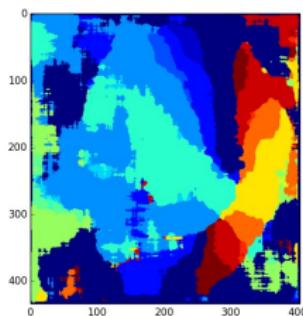
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



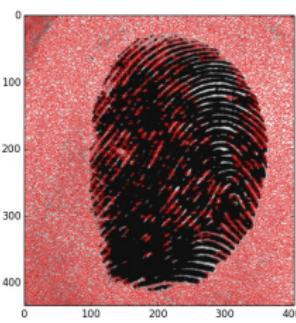
(d) Janela 45x45

(e) Retificado

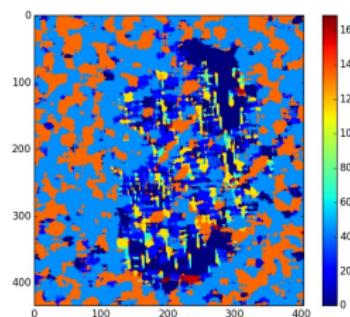
(f) Pixels retificados



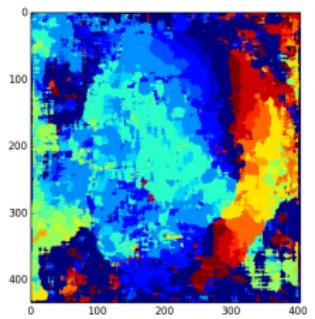
(a) Original



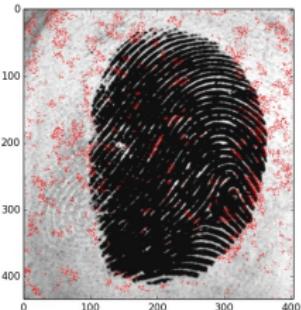
(b) Watershed



(c) Direção watershed



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



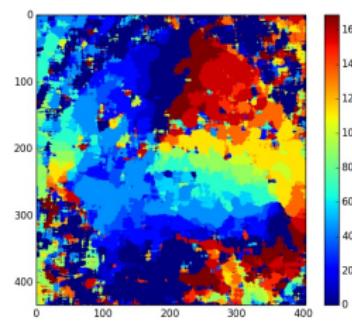
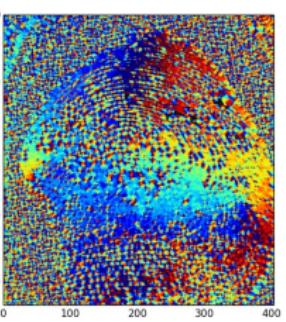
(e) Marcadores



(a) Original



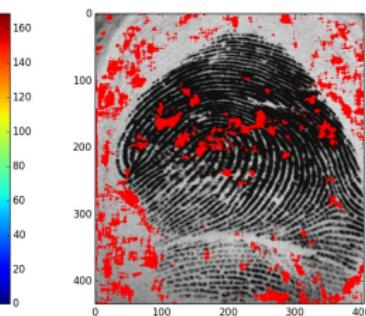
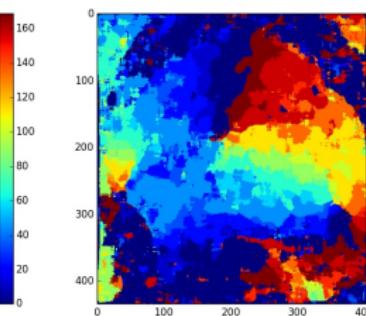
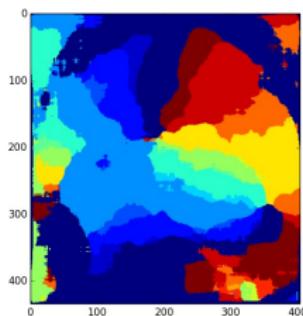
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



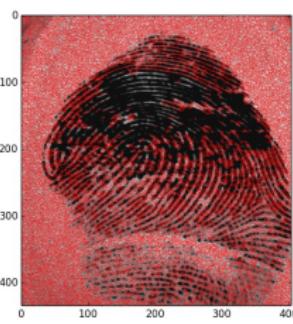
(d) Janela 45x45

(e) Retificado

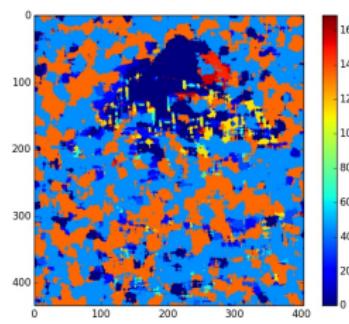
(f) Pixels retificados



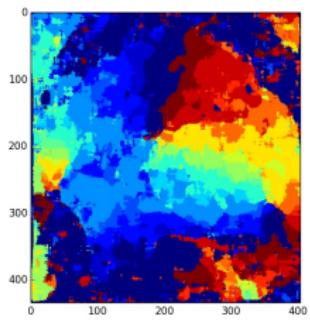
(a) Original



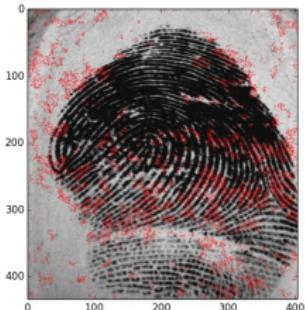
(b) Watershed



(c) Direção watershed



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



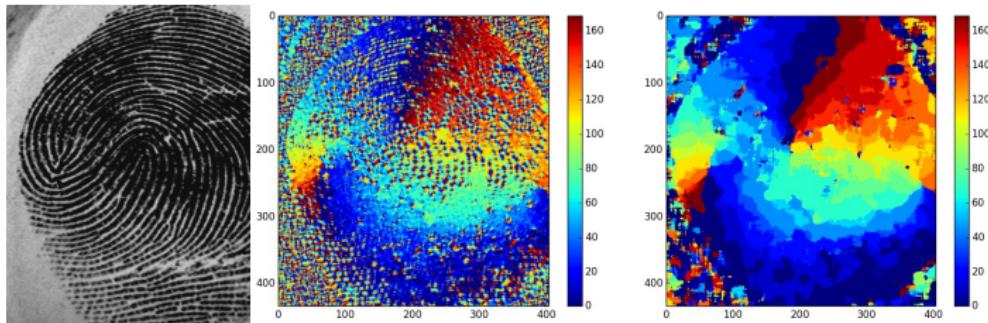
(e) Marcadores



(a) Original



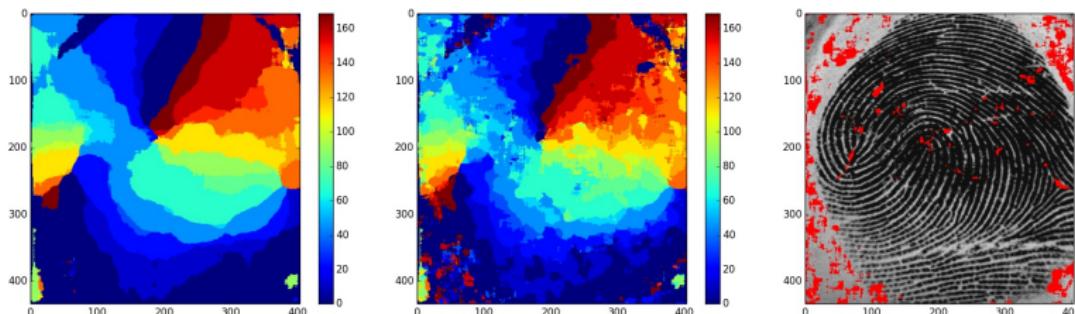
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



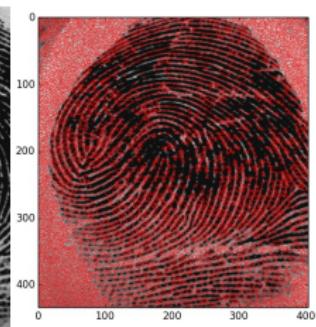
(d) Janela 45x45

(e) Retificado

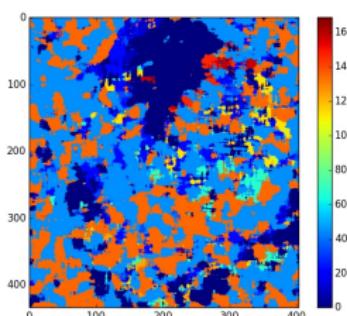
(f) Pixels retificados



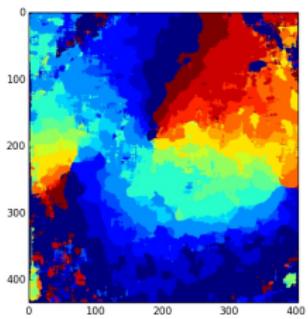
(a) Original



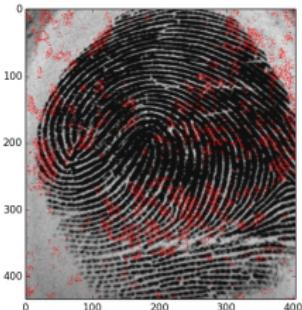
(b) Watershed



(c) Direção watershed



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



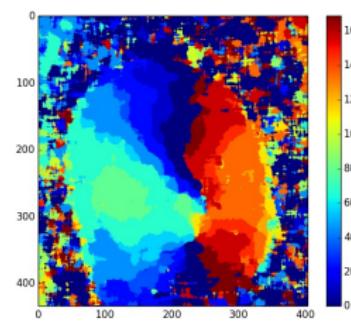
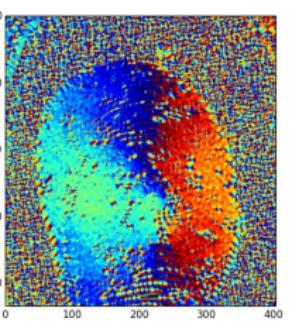
(e) Marcadores



(a) Original



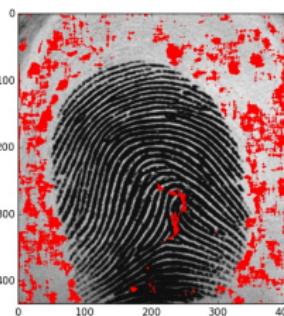
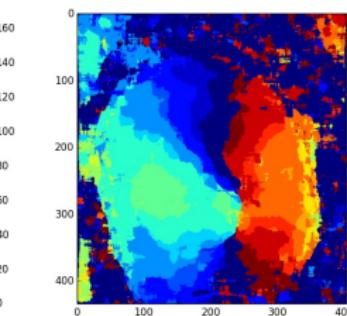
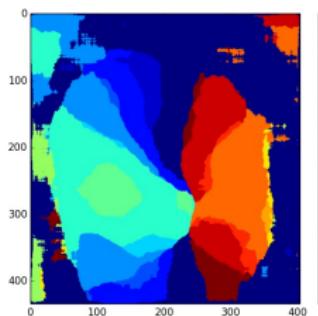
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



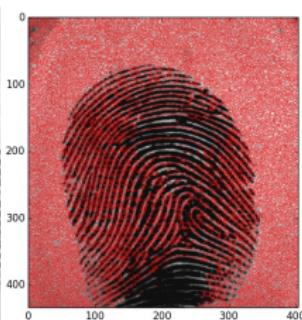
(d) Janela 45x45

(e) Retificado

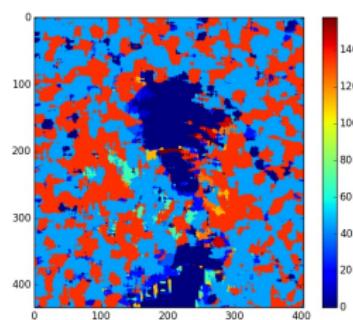
(f) Pixels retificados



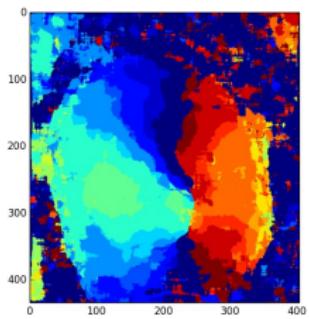
(a) Original



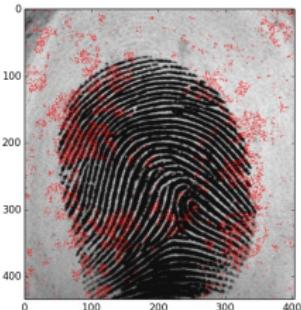
(b) Watershed



(c) Direção watershed



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



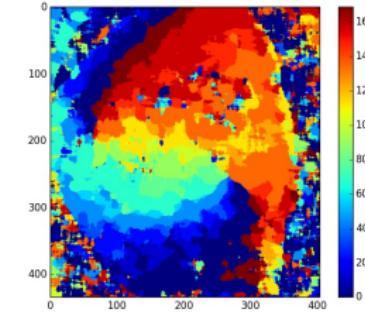
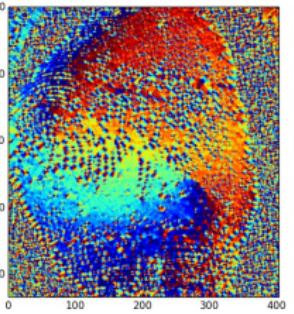
(e) Marcadores



(a) Original



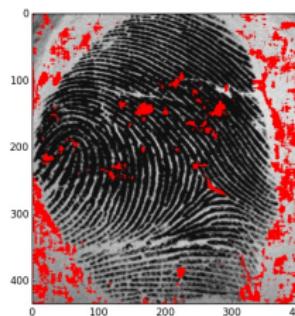
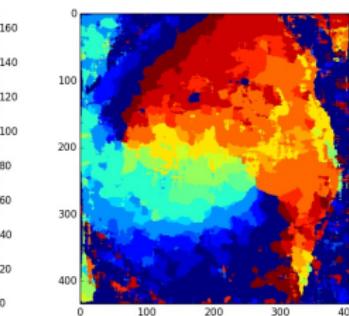
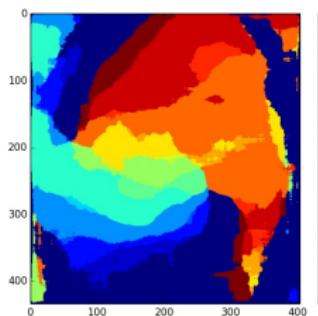
(b) Resultado final



(a) Original

(b) Info. Direcional

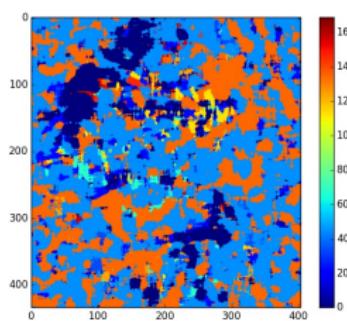
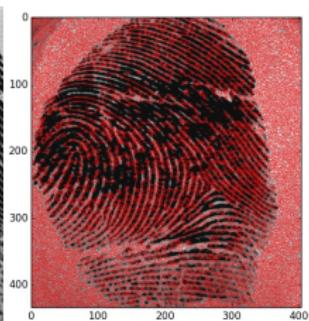
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

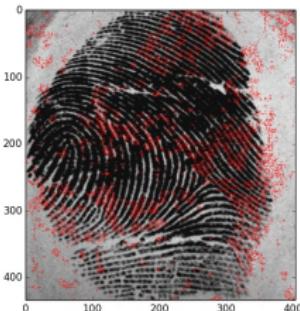
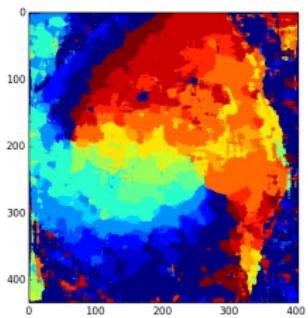
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



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

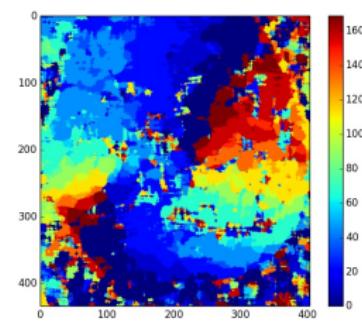
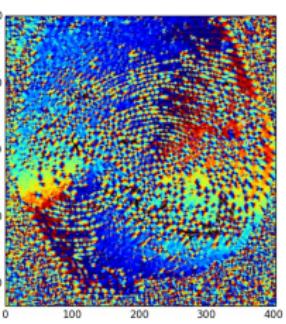
(e) Marcadores



(a) Original



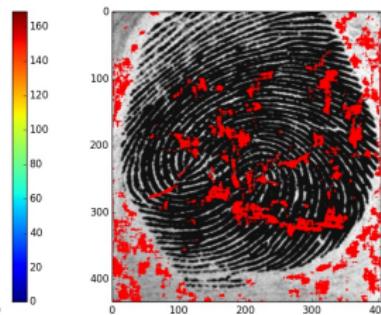
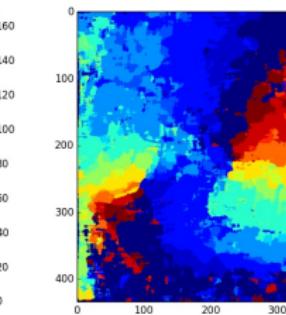
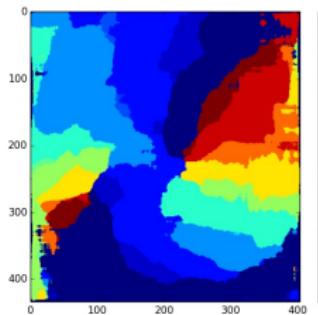
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



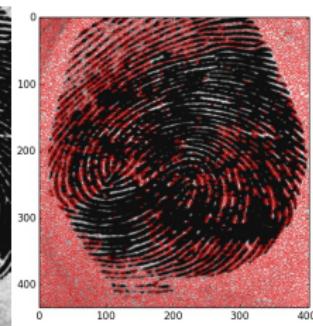
(d) Janela 45x45

(e) Retificado

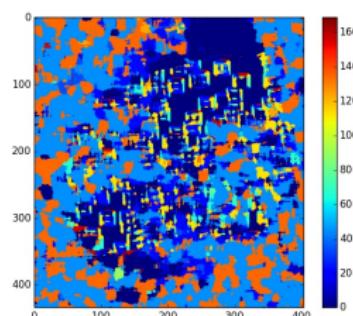
(f) Pixels retificados



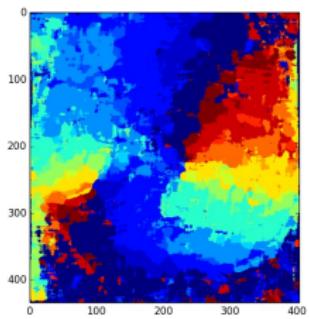
(a) Original



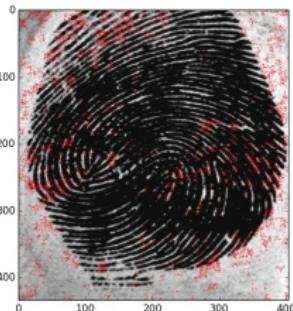
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



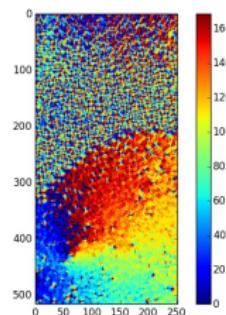
(a) Original



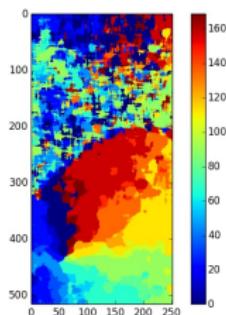
(b) Resultado final



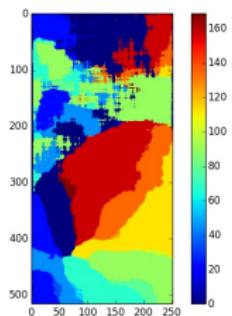
(a) Original



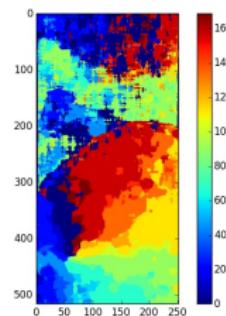
(b) Info. Direcional



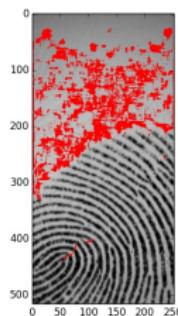
(c) Janela 15x15



(d) Janela 45x45



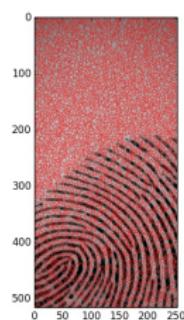
(e) Retificado



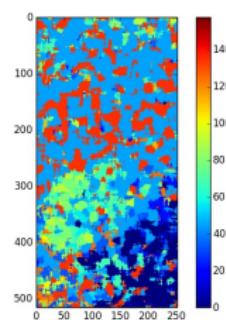
(f) Pixels retificados



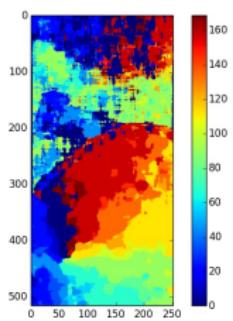
(a) Original



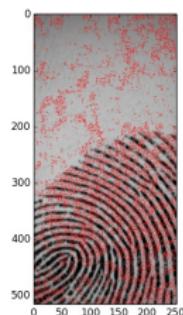
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



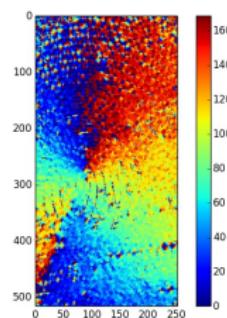
(a) Original



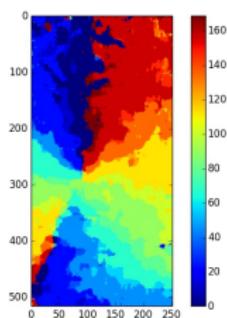
(b) Resultado final



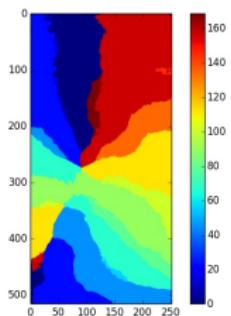
(a) Original



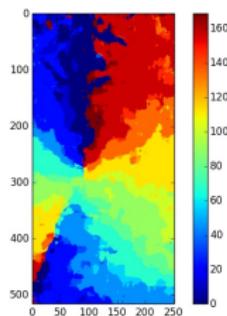
(b) Info. Direcional



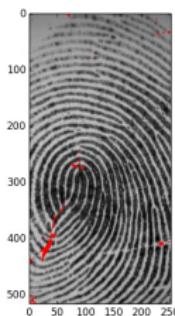
(c) Janela 15x15



(d) Janela 45x45



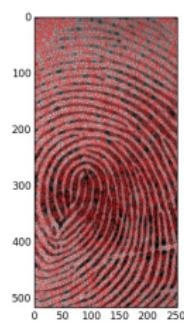
(e) Retificado



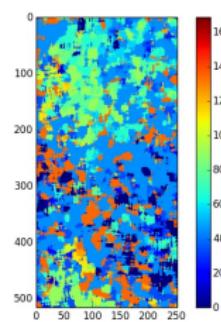
(f) Pixels retificados



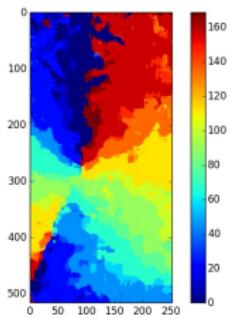
(a) Original



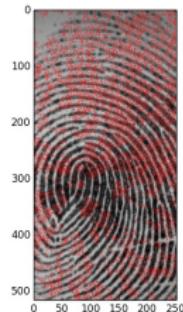
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



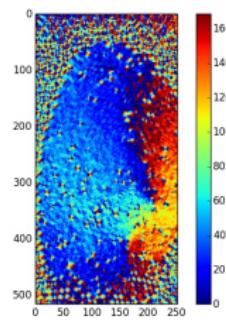
(a) Original



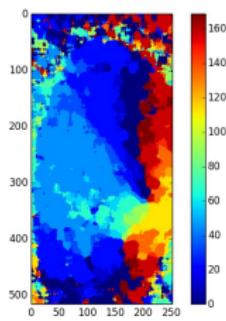
(b) Resultado final



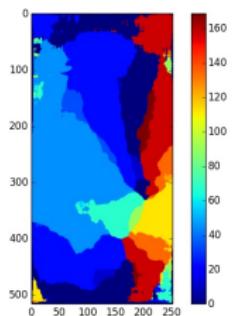
(a) Original



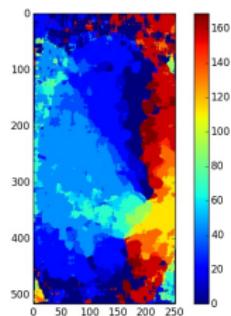
(b) Info. Direcional



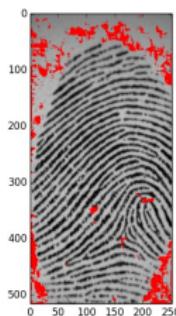
(c) Janela 15x15



(d) Janela 45x45



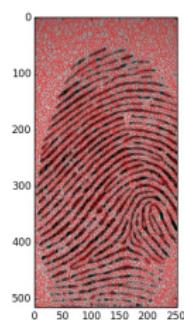
(e) Retificado



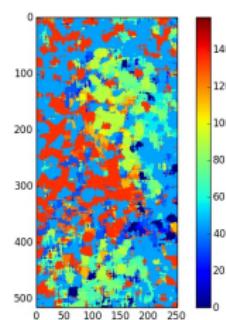
(f) Pixels retificados



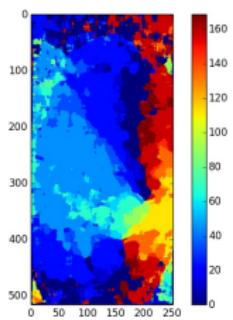
(a) Original



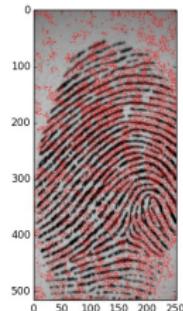
(b) Watershed



(c) Direção watershed



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



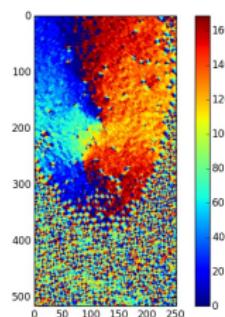
(e) Marcadores



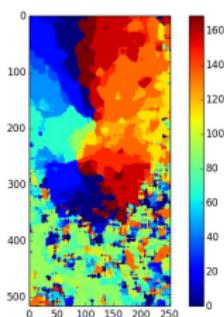
(a) Original



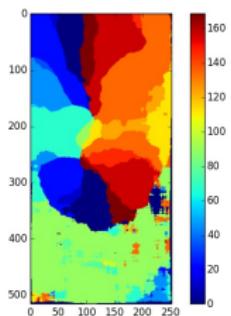
(b) Resultado final



(a) Original

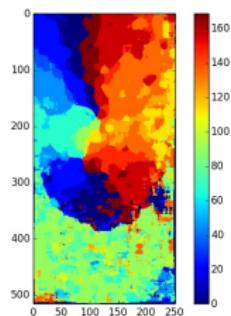


(c) Janela 15x15

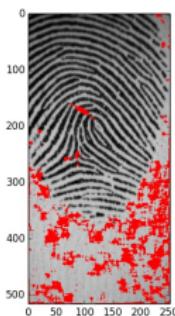


(d) Janela 45x45

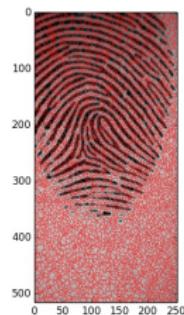
(b) Info. Direcional



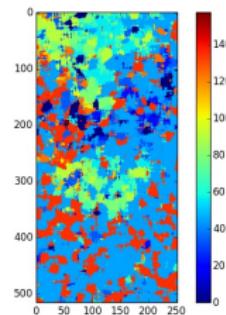
(e) Retificado



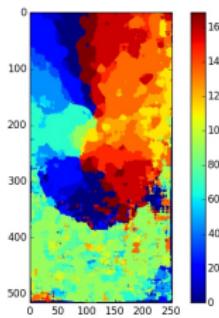
(f) Pixels retificados



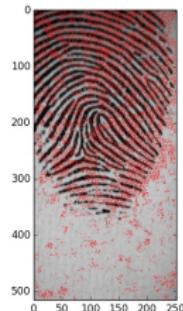
(a) Original



(c) Direção watershed



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



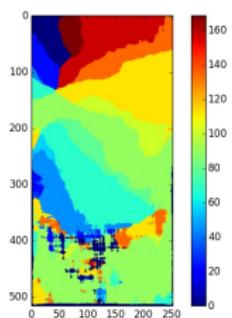
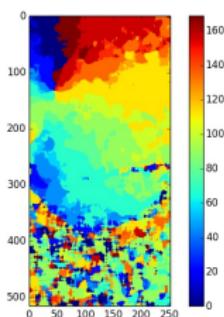
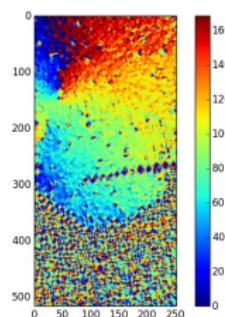
(e) Marcadores



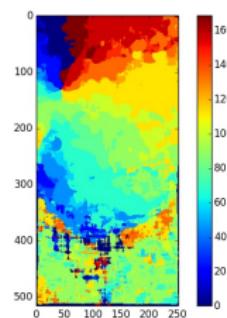
(a) Original



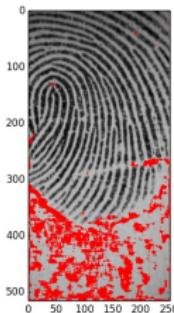
(b) Resultado final



(b) Info. Direcional



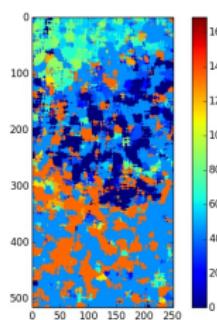
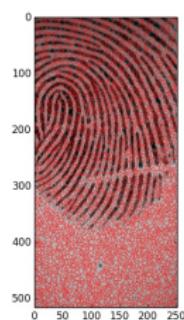
(c) Janela 15x15



(d) Janela 45x45

(e) Retificado

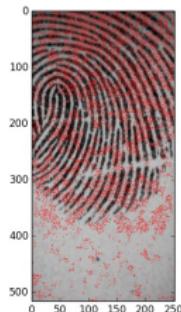
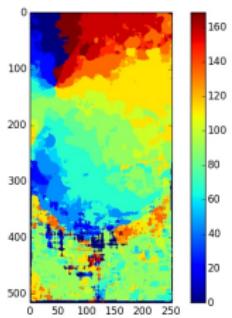
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



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

(e) Marcadores



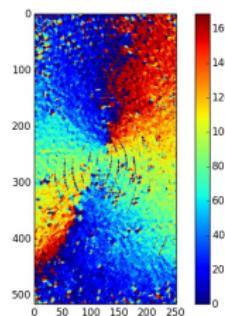
(a) Original



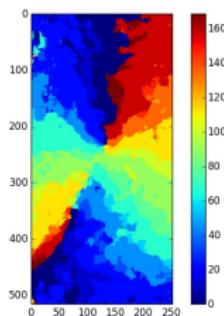
(b) Resultado final



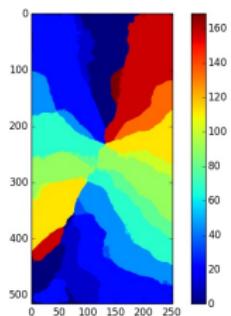
(a) Original



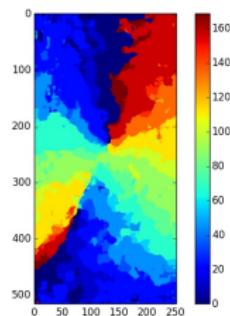
(b) Info. Direcional



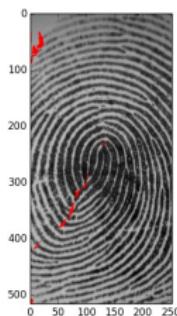
(c) Janela 15x15



(d) Janela 45x45



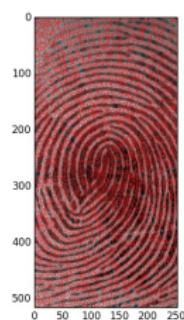
(e) Retificado



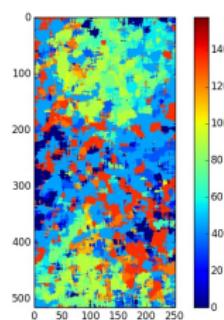
(f) Pixels retificados



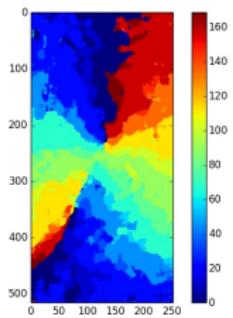
(a) Original



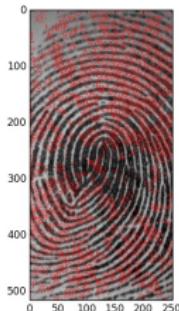
(b) Watershed



(c) Direção watershed



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



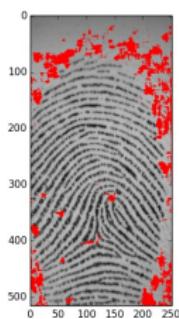
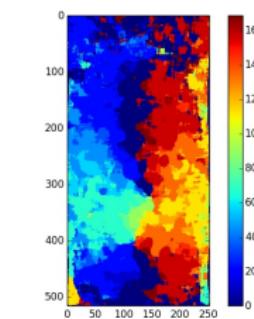
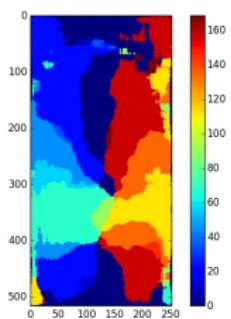
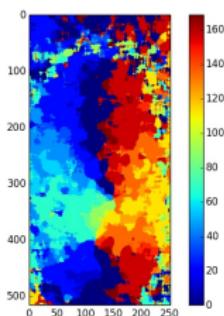
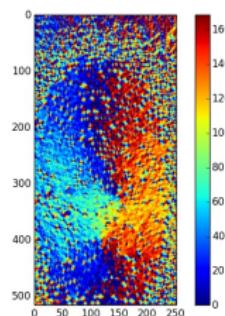
(e) Marcadores

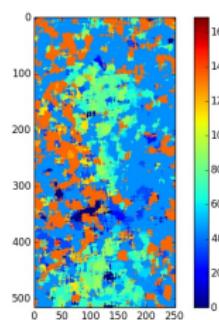
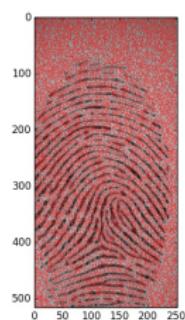


(a) Original



(b) Resultado final

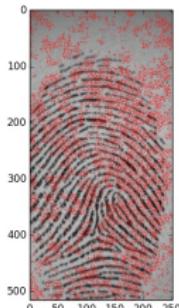
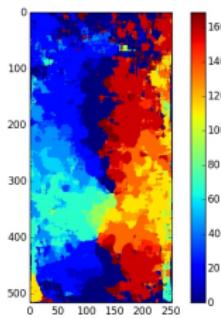




(a) Original

(b) Watershed

(c) Direção watershed



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

(e) Marcadores



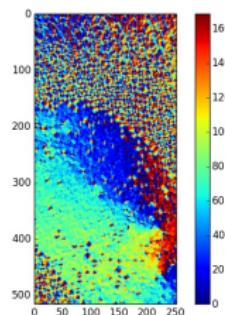
(a) Original



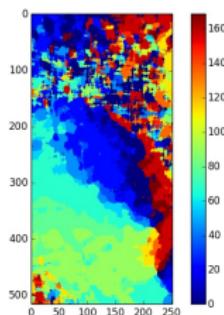
(b) Resultado final



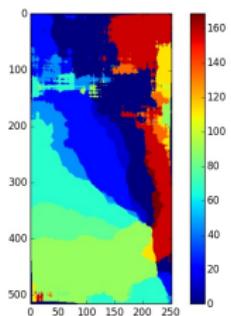
(a) Original



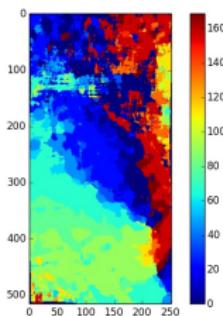
(b) Info. Direcional



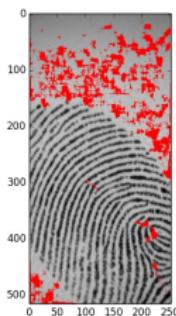
(c) Janela 15x15



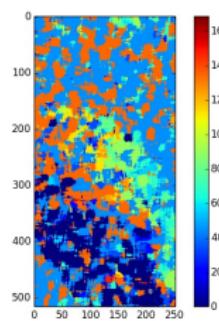
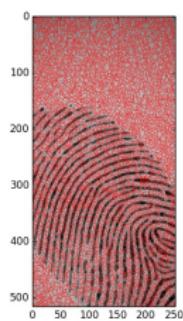
(d) Janela 45x45



(e) Retificado



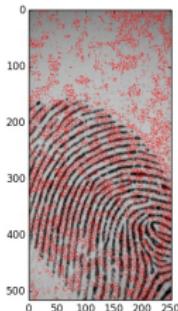
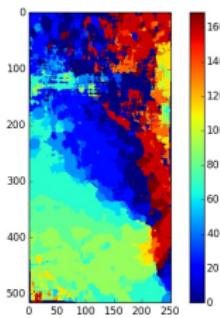
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



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

(e) Marcadores



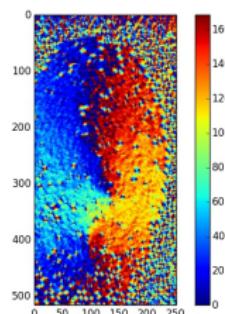
(a) Original



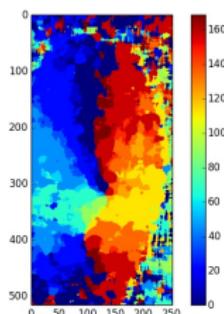
(b) Resultado final



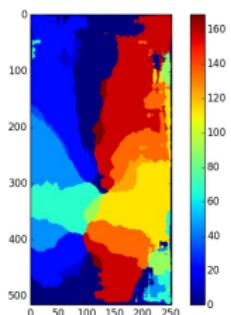
(a) Original



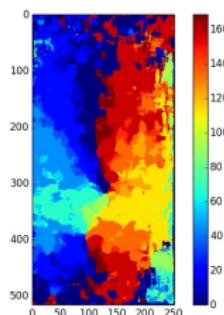
(b) Info. Direcional



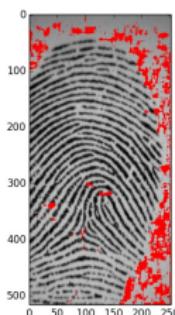
(c) Janela 15x15



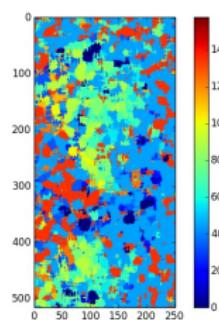
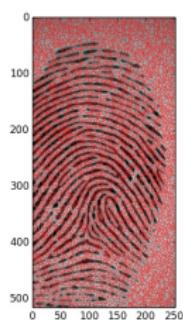
(d) Janela 45x45



(e) Retificado



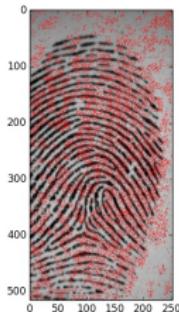
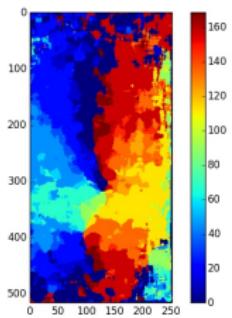
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



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

(e) Marcadores



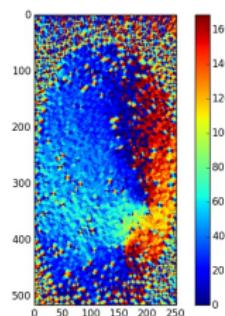
(a) Original



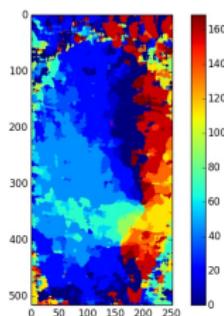
(b) Resultado final



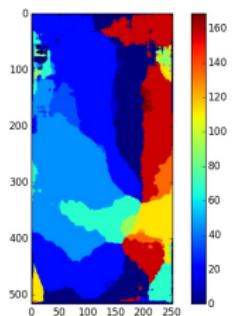
(a) Original



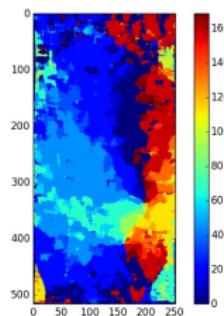
(b) Info. Direcional



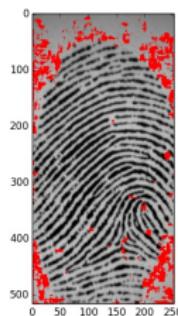
(c) Janela 15x15



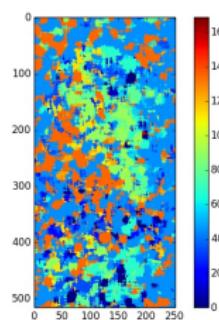
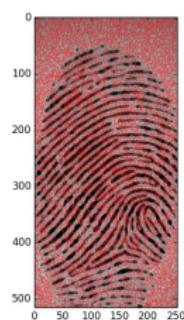
(d) Janela 45x45



(e) Retificado



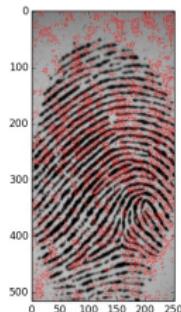
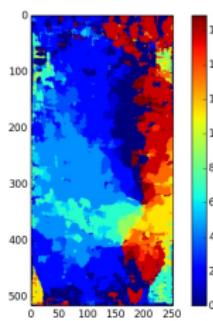
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



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

(e) Marcadores



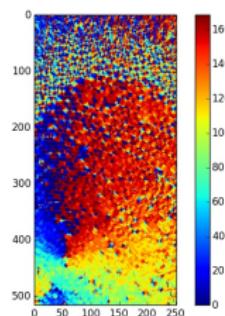
(a) Original



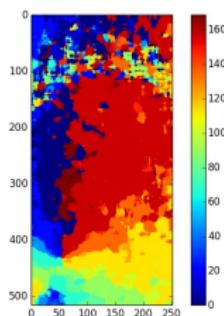
(b) Resultado final



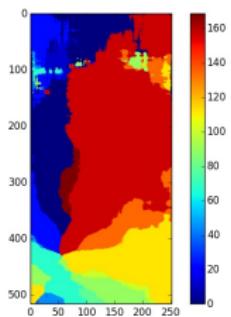
(a) Original



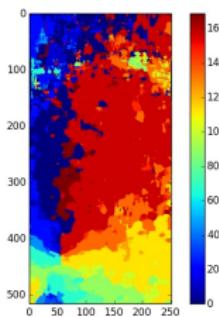
(b) Info. Direcional



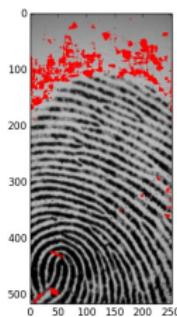
(c) Janela 15x15



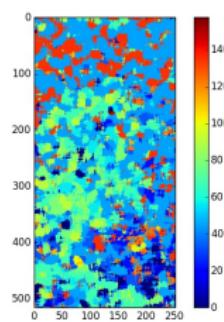
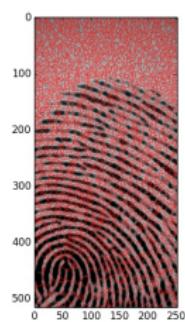
(d) Janela 45x45



(e) Retificado



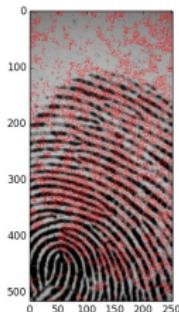
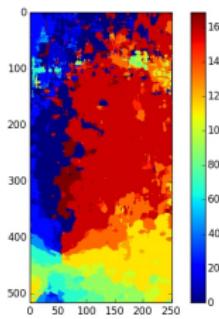
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



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

(e) Marcadores



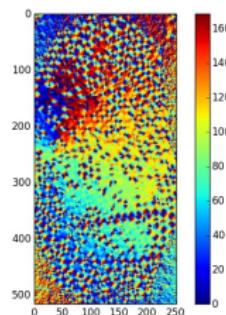
(a) Original



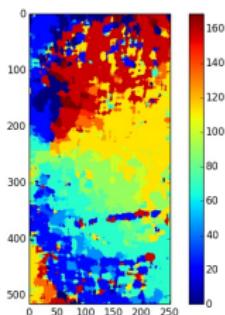
(b) Resultado final



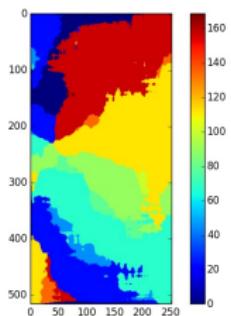
(a) Original



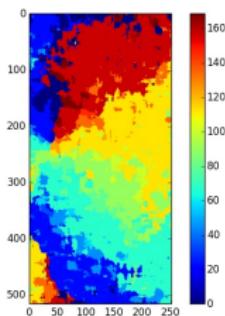
(b) Info. Direcional



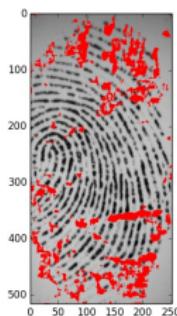
(c) Janela 15x15



(d) Janela 45x45



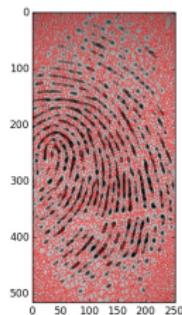
(e) Retificado



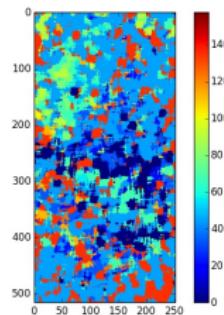
(f) Pixels retificados



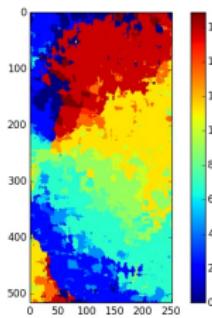
(a) Original



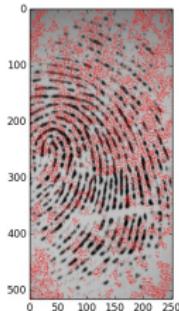
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



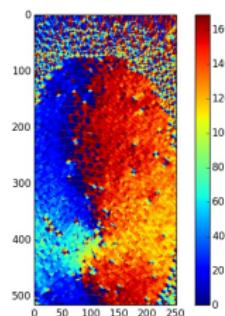
(a) Original



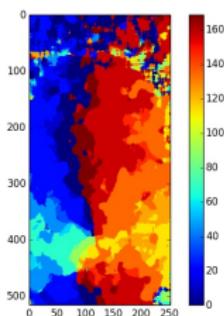
(b) Resultado final



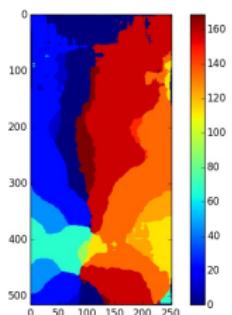
(a) Original



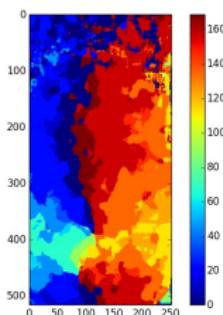
(b) Info. Direcional



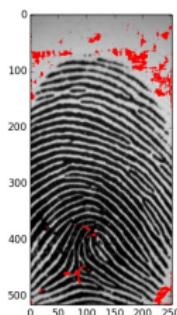
(c) Janela 15x15



(d) Janela 45x45



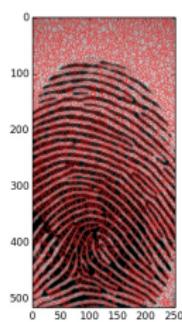
(e) Retificado



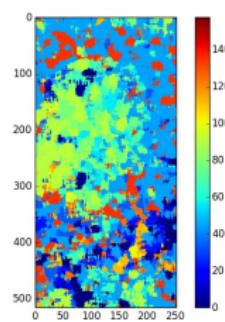
(f) Pixels retificados



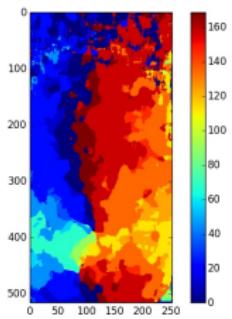
(a) Original



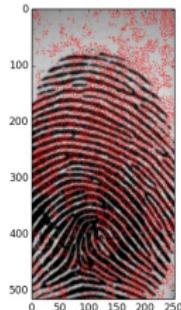
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



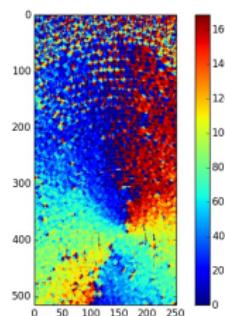
(a) Original



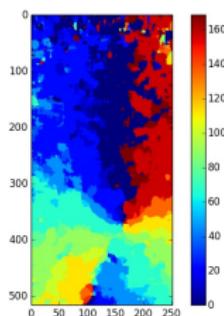
(b) Resultado final



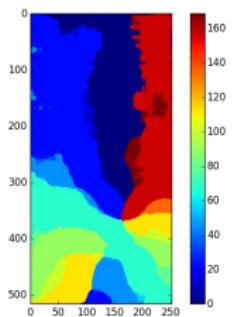
(a) Original



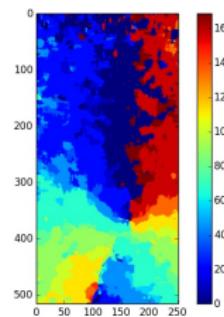
(b) Info. Direcional



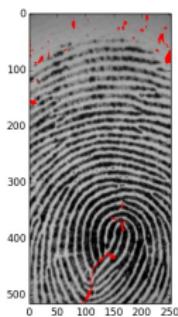
(c) Janela 15x15



(d) Janela 45x45



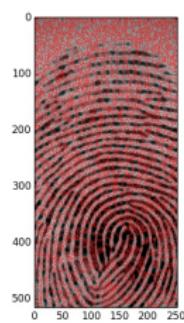
(e) Retificado



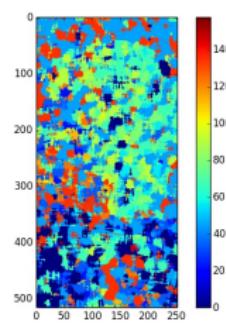
(f) Pixels retificados



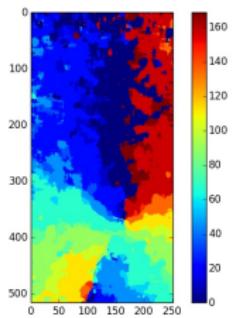
(a) Original



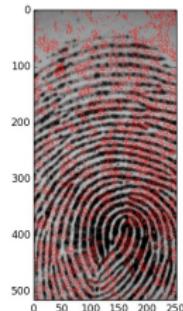
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



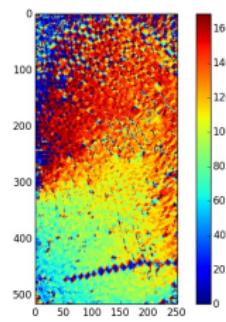
(a) Original



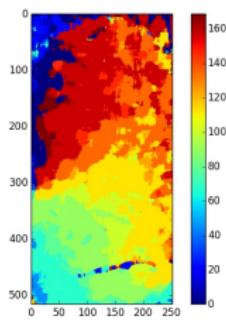
(b) Resultado final



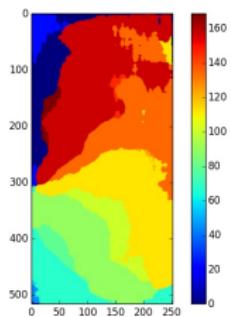
(a) Original



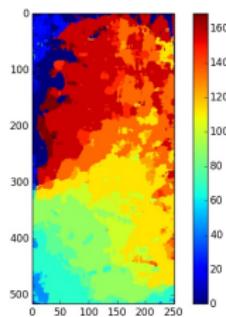
(b) Info. Direcional



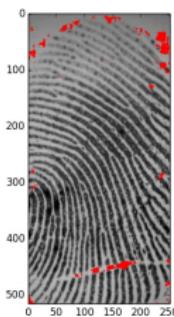
(c) Janela 15x15



(d) Janela 45x45



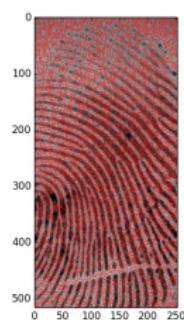
(e) Retificado



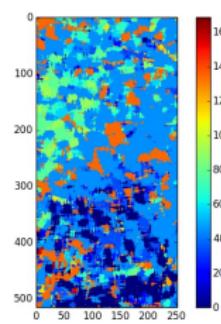
(f) Pixels retificados



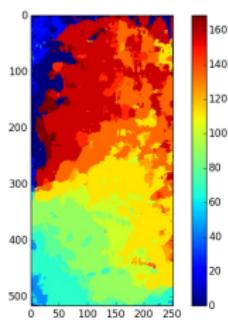
(a) Original



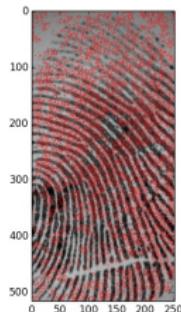
(b) Watershed



(c) Direção watershed



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



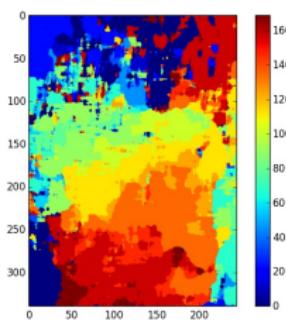
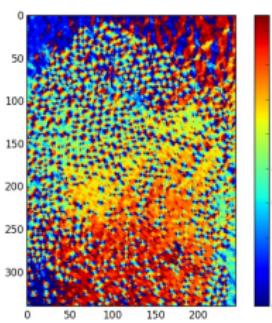
(e) Marcadores



(a) Original



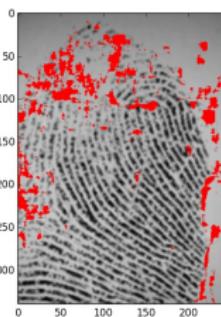
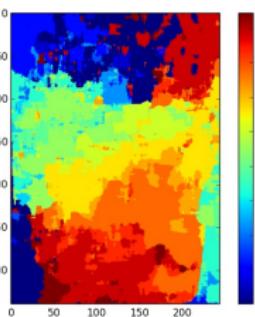
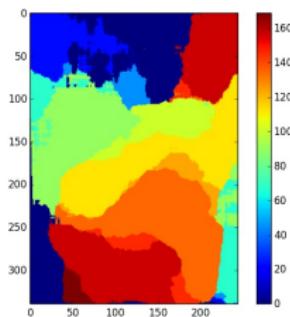
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



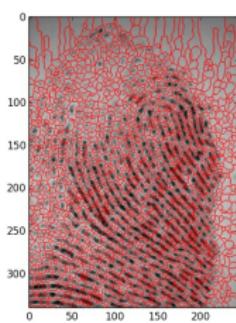
(d) Janela 45x45

(e) Retificado

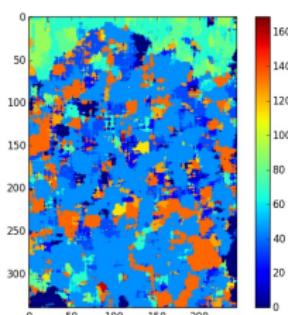
(f) Pixels retificados



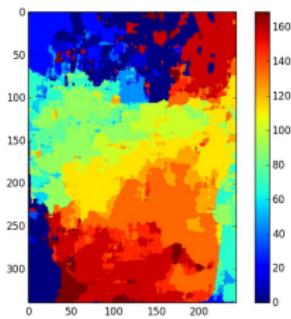
(a) Original



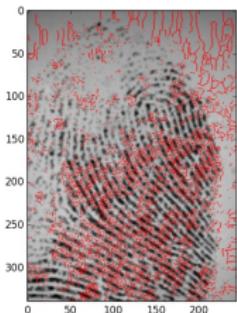
(b) Watershed



(c) Direção watershed



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



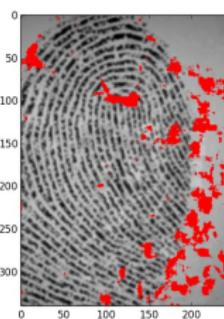
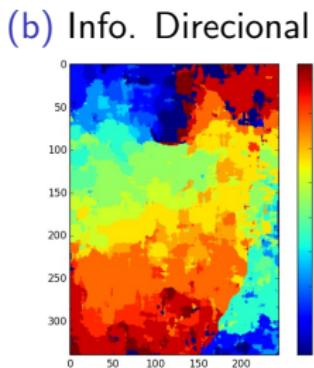
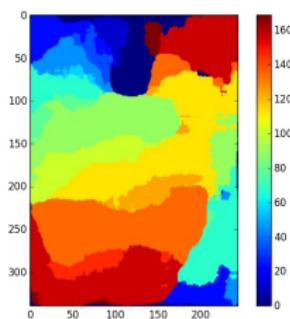
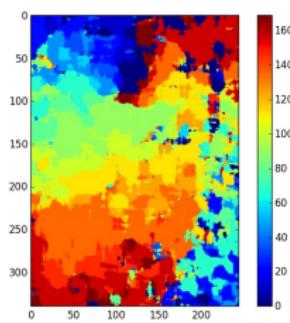
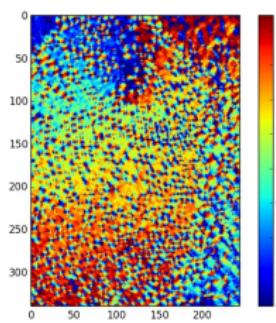
(e) Marcadores



(a) Original

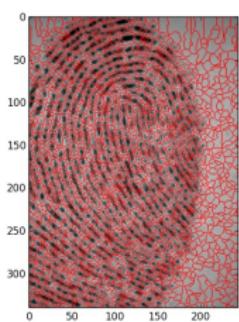


(b) Resultado final

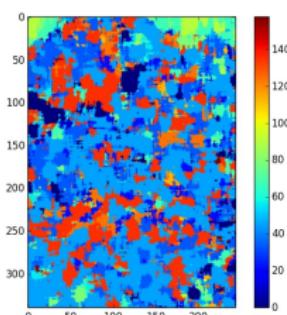




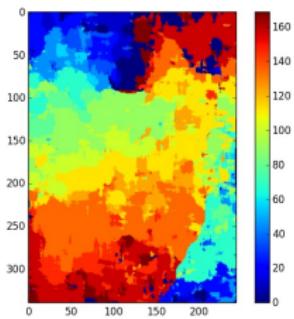
(a) Original



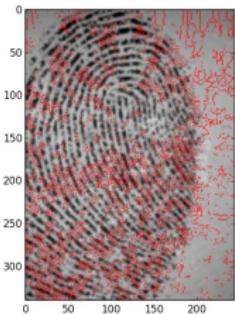
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



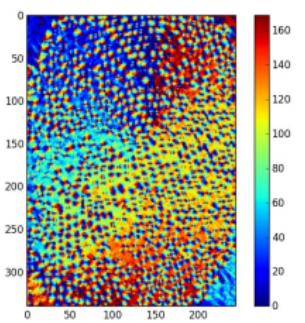
(a) Original



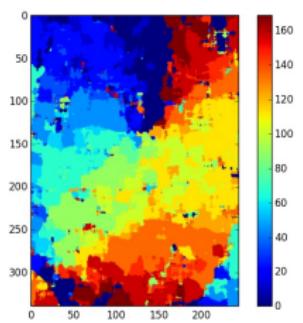
(b) Resultado final



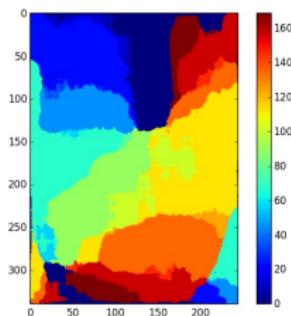
(a) Original



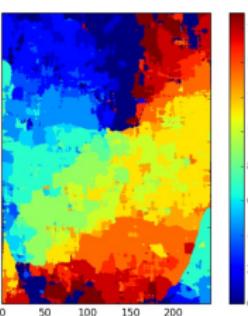
(b) Info. Direcional



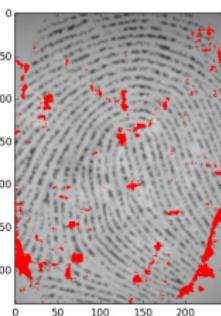
(c) Janela 15x15



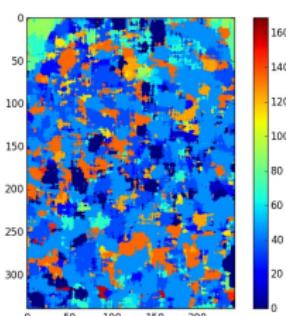
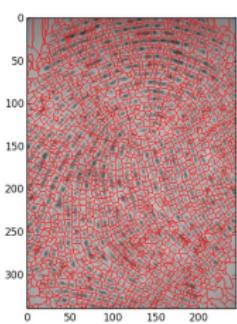
(d) Janela 45x45



(e) Retificado



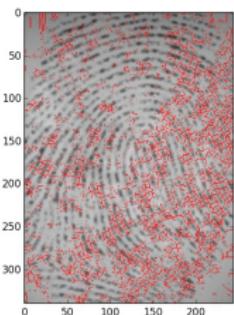
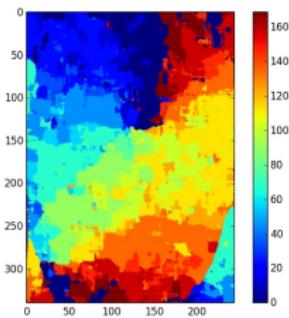
(f) Pixels retificados



(a) Original

(b) Watershed

(c) Direção watershed



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

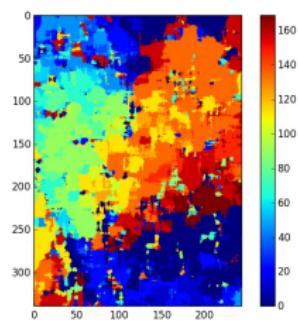
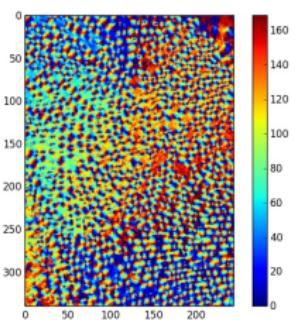
(e) Marcadores



(a) Original



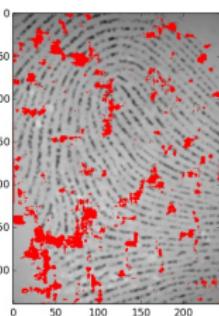
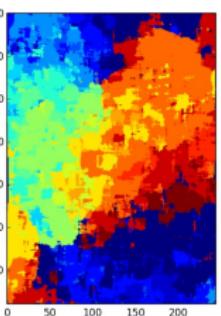
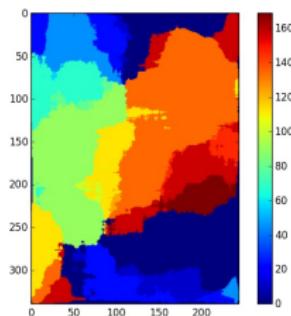
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



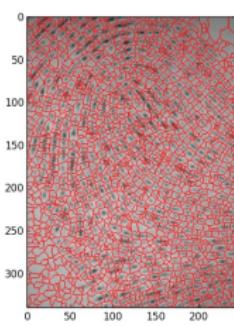
(d) Janela 45x45

(e) Retificado

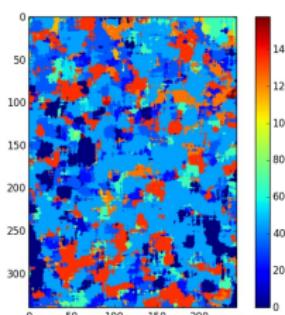
(f) Pixels retificados



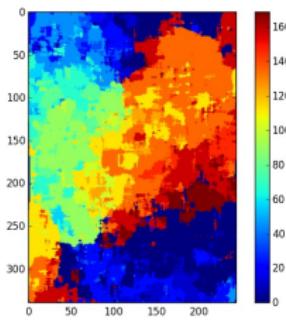
(a) Original



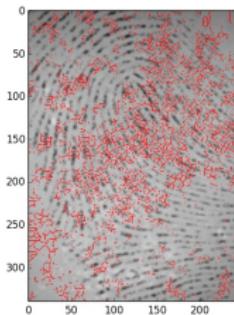
(b) Watershed



(c) Direção watershed



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



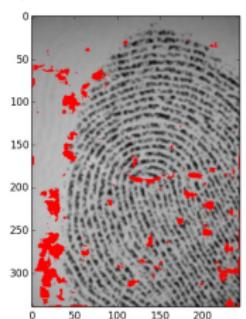
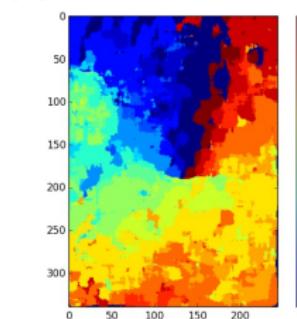
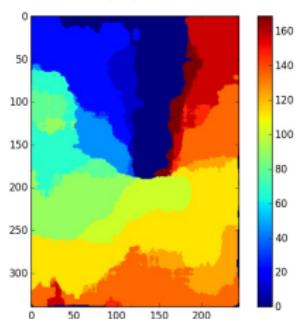
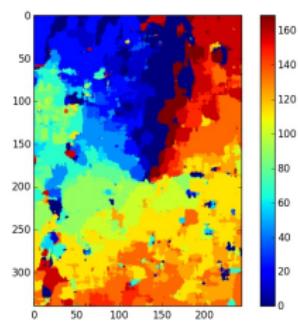
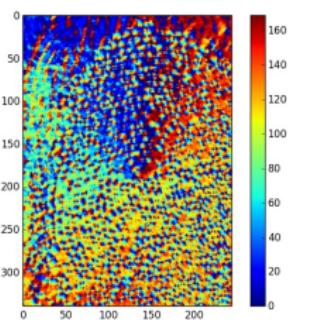
(e) Marcadores



(a) Original



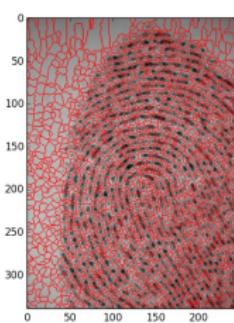
(b) Resultado final



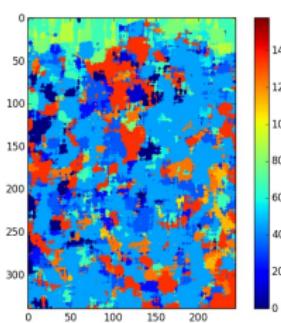
(f) Pixels retificados



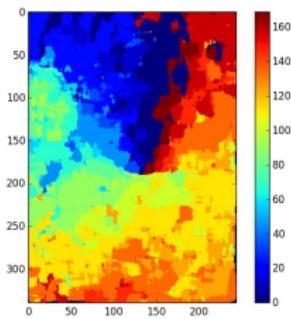
(a) Original



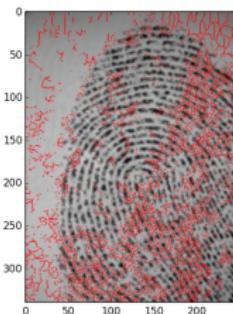
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



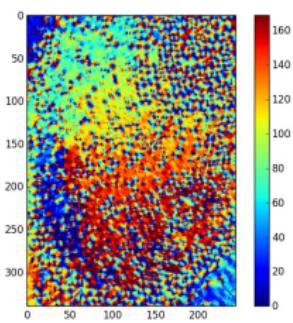
(a) Original



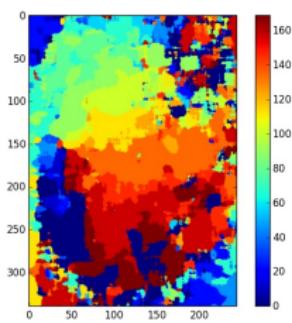
(b) Resultado final



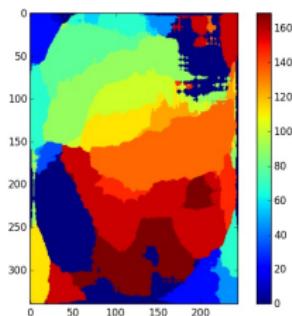
(a) Original



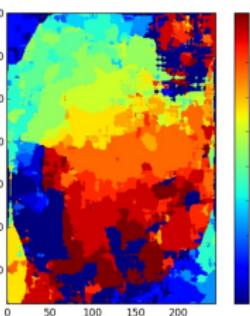
(b) Info. Direcional



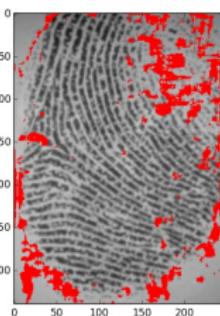
(c) Janela 15x15



(d) Janela 45x45



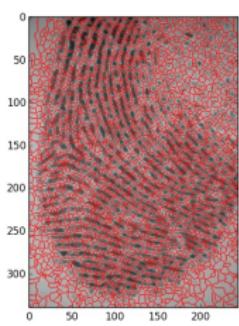
(e) Retificado



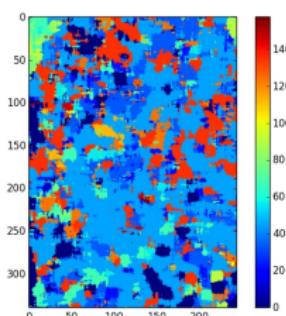
(f) Pixels retificados



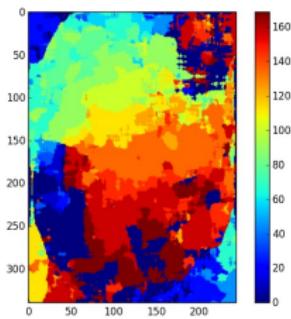
(a) Original



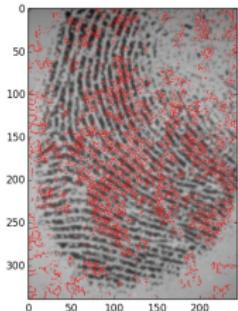
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



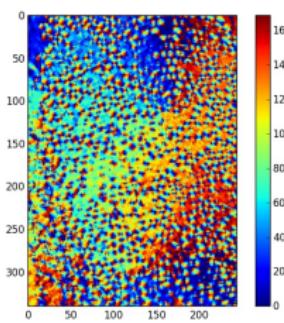
(a) Original



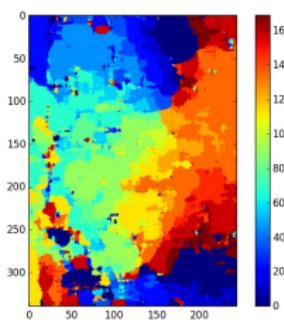
(b) Resultado final



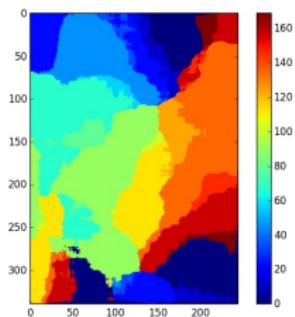
(a) Original



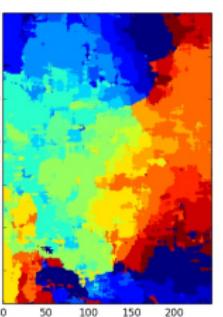
(b) Info. Direcional



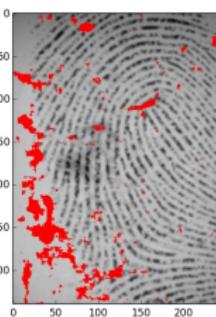
(c) Janela 15x15



(d) Janela 45x45



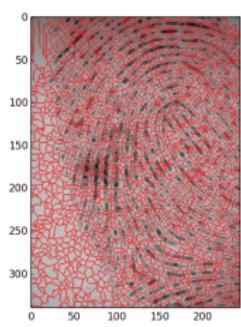
(e) Retificado



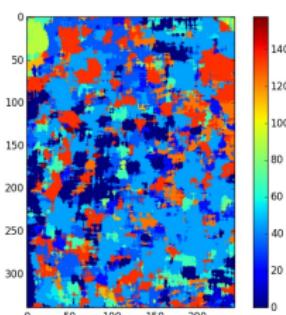
(f) Pixels retificados



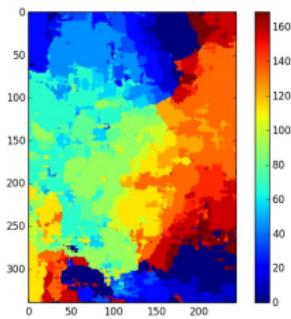
(a) Original



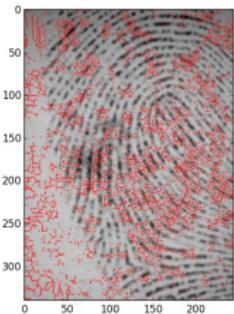
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



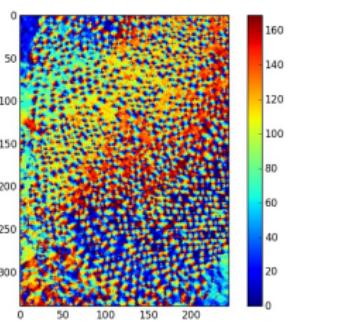
(a) Original



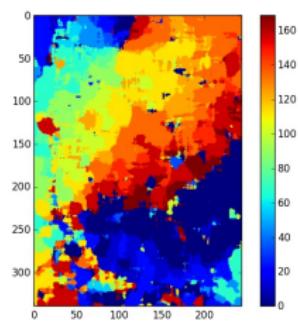
(b) Resultado final



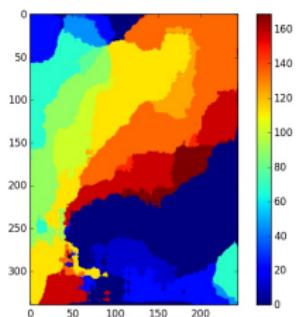
(a) Original



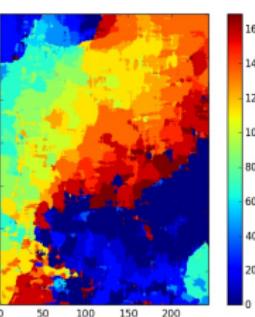
(b) Info. Direcional



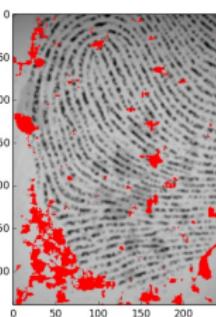
(c) Janela 15x15



(d) Janela 45x45



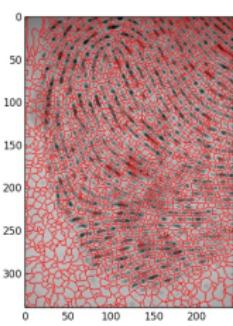
(e) Retificado



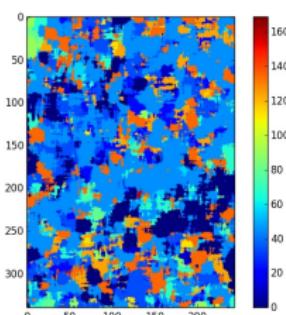
(f) Pixels retificados



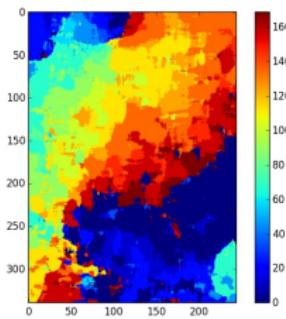
(a) Original



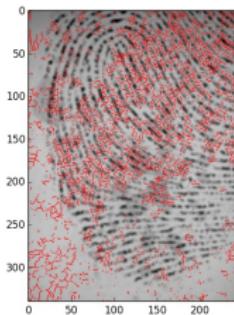
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



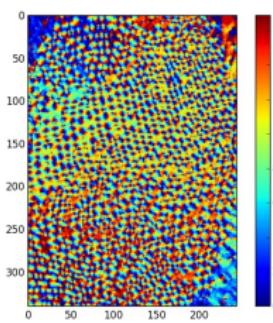
(a) Original



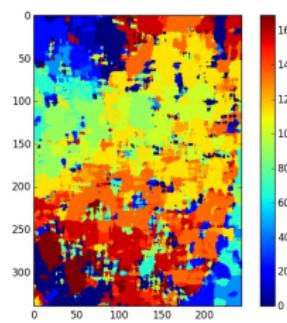
(b) Resultado final



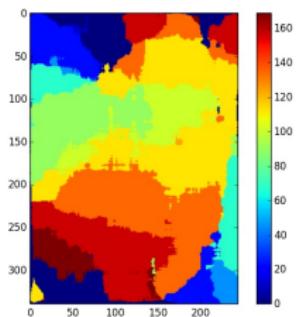
(a) Original



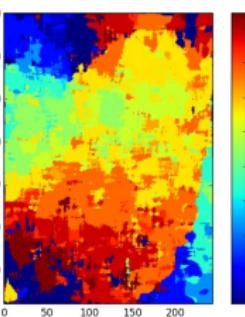
(b) Info. Direcional



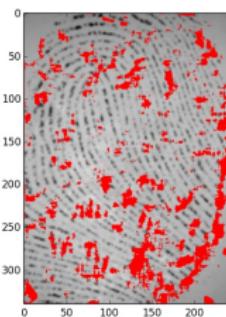
(c) Janela 15x15



(d) Janela 45x45



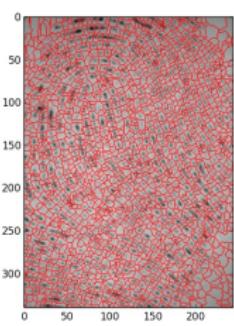
(e) Retificado



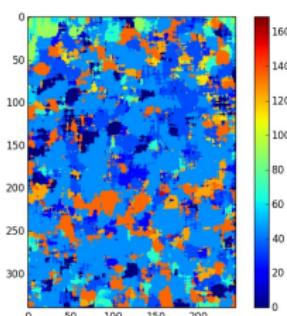
(f) Pixels retificados



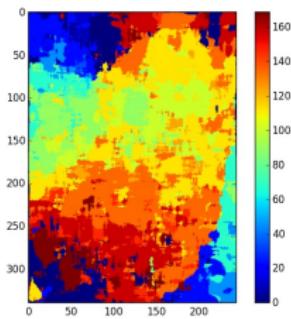
(a) Original



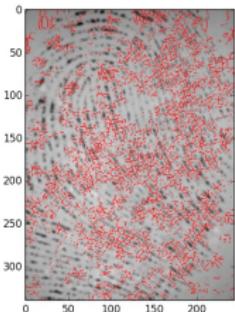
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



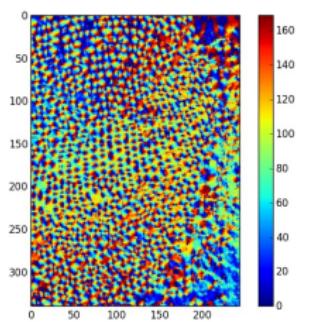
(a) Original



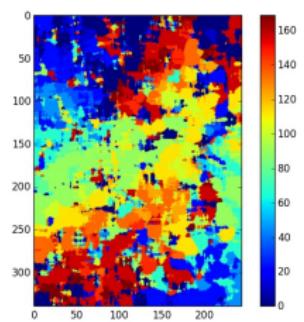
(b) Resultado final



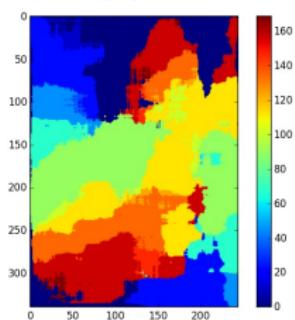
(a) Original



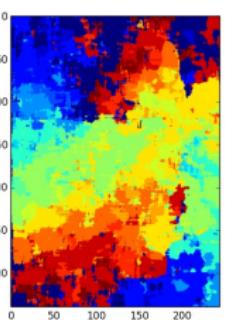
(b) Info. Direcional



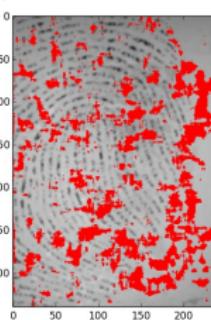
(c) Janela 15x15



(d) Janela 45x45



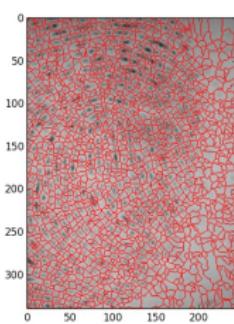
(e) Retificado



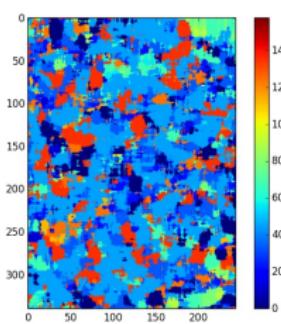
(f) Pixels retificados



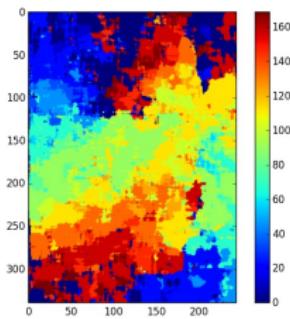
(a) Original



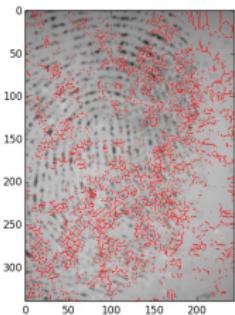
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



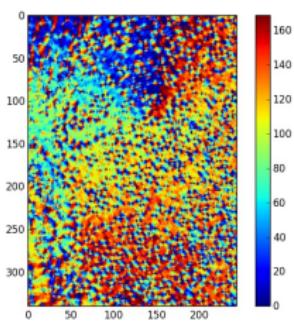
(a) Original



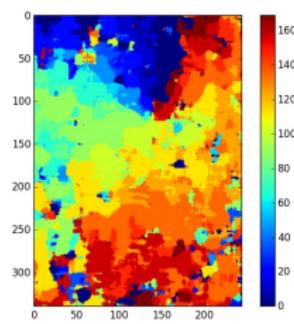
(b) Resultado final



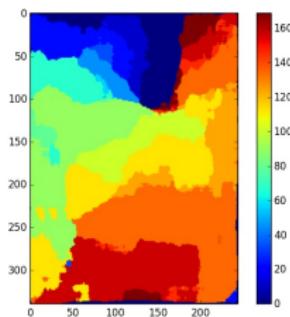
(a) Original



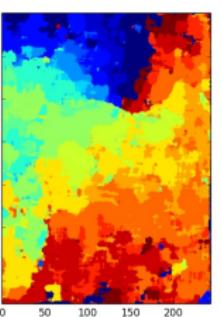
(b) Info. Direcional



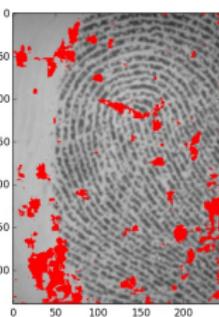
(c) Janela 15x15



(d) Janela 45x45



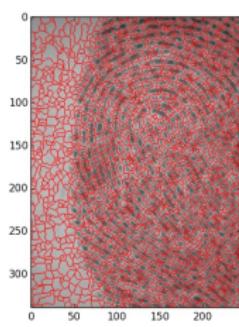
(e) Retificado



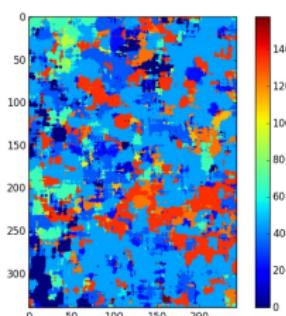
(f) Pixels retificados



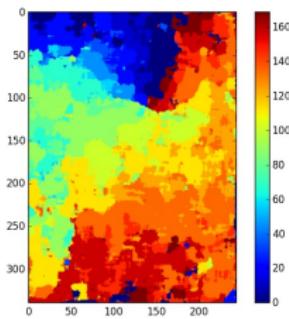
(a) Original



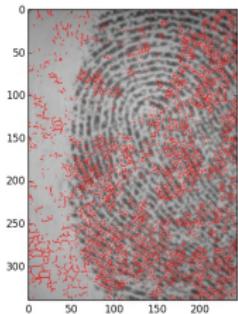
(b) Watershed



(c) Direção watershed



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



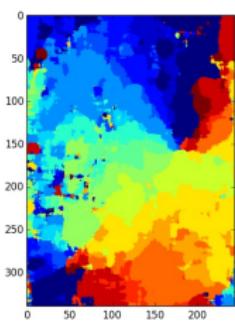
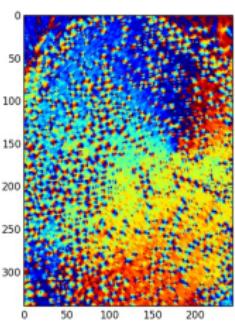
(e) Marcadores



(a) Original



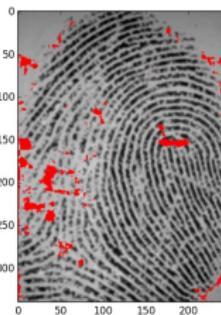
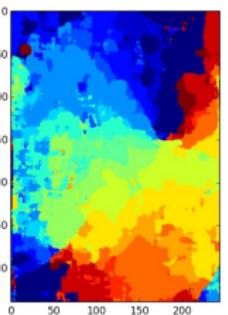
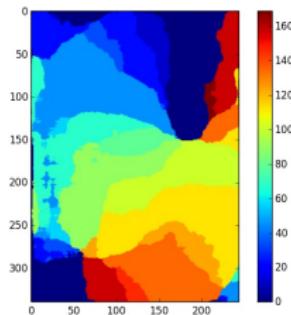
(b) Resultado final



(a) Original

(b) Info. Direcional

(c) Janela 15x15



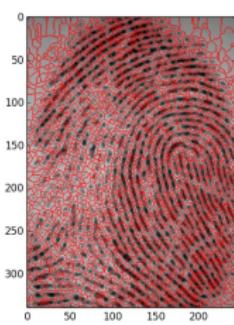
(d) Janela 45x45

(e) Retificado

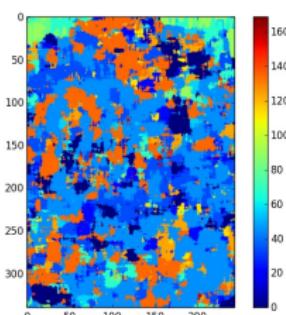
(f) Pixels retificados



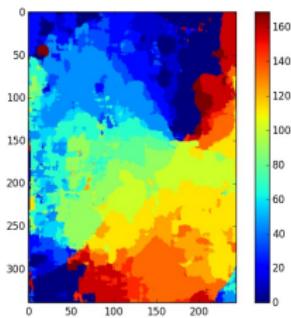
(a) Original



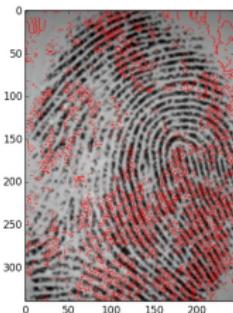
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



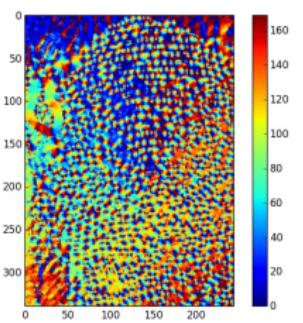
(a) Original



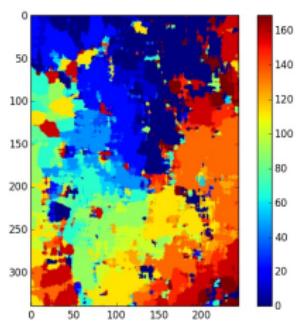
(b) Resultado final



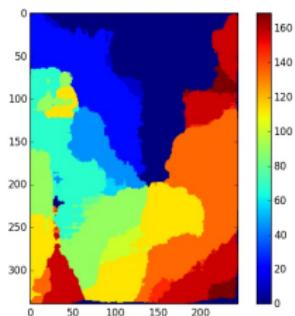
(a) Original



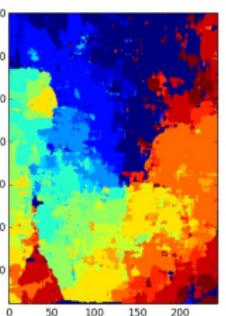
(b) Info. Direcional



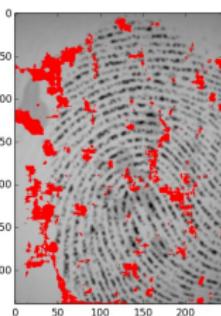
(c) Janela 15x15



(d) Janela 45x45



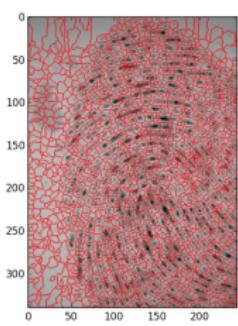
(e) Retificado



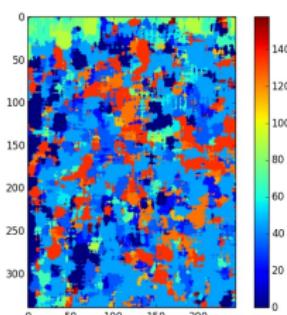
(f) Pixels retificados



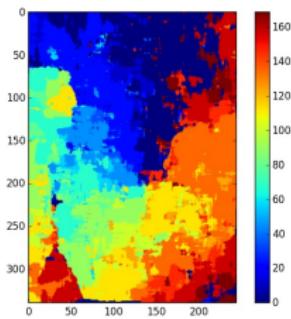
(a) Original



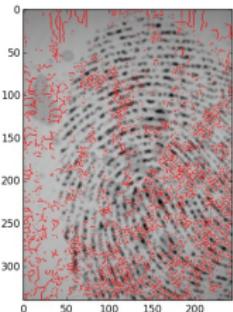
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



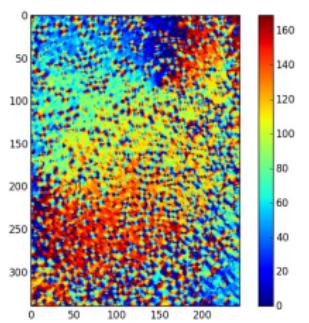
(a) Original



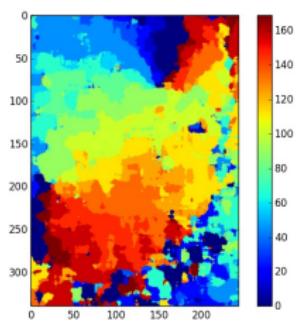
(b) Resultado final



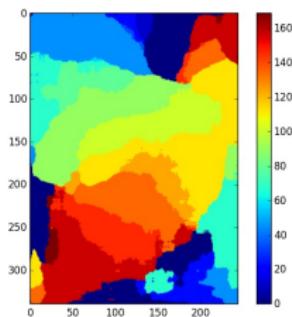
(a) Original



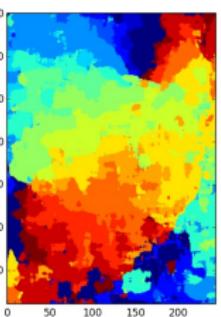
(b) Info. Direcional



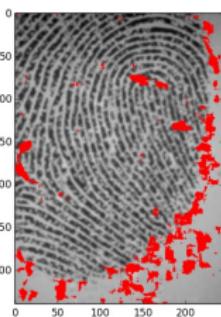
(c) Janela 15x15



(d) Janela 45x45



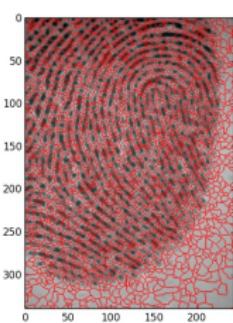
(e) Retificado



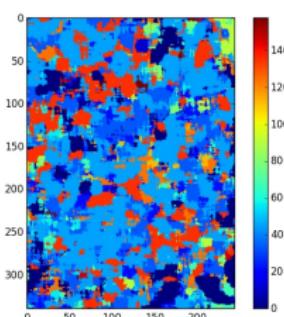
(f) Pixels retificados



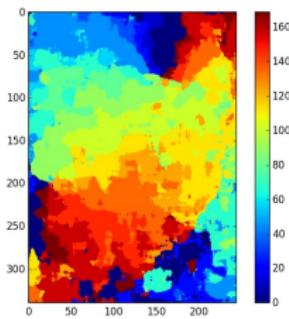
(a) Original



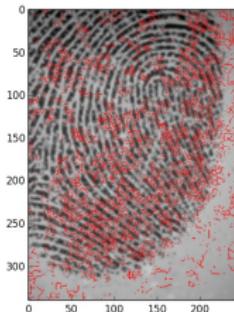
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



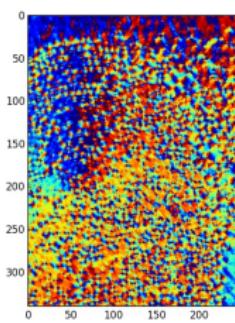
(a) Original



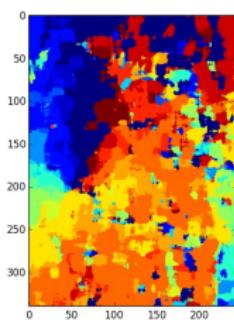
(b) Resultado final



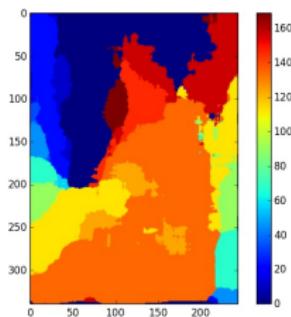
(a) Original



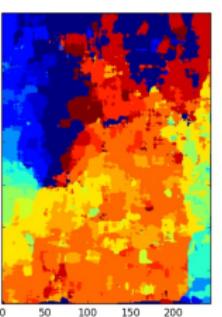
(b) Info. Direcional



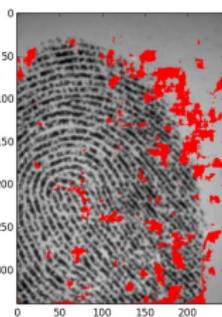
(c) Janela 15x15



(d) Janela 45x45



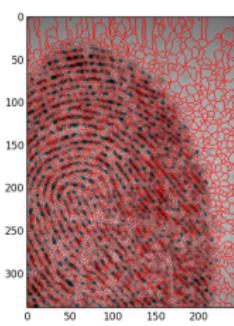
(e) Retificado



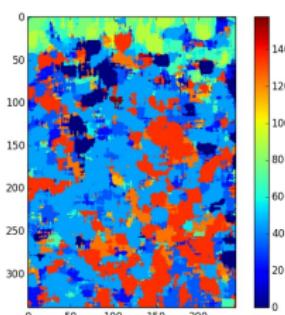
(f) Pixels retificados



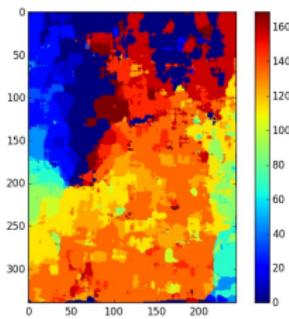
(a) Original



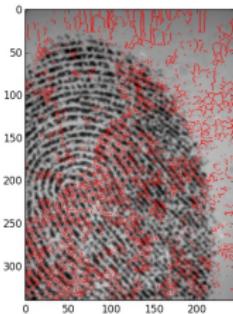
(b) Watershed



(c) Direção watershed



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



(e) Marcadores



(a) Original



(b) Resultado final