Quantum Image Processing: Super Resolution Filters

Mentor: Robert Loredo

IBM Quantum Ambassador worldwide lead, Qiskit

Advocate, IBM Master Inventor



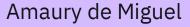
Blade Runner. Directed by Ridley Scott. Warner Bros, 1982.



Team presentation







France

Into QC since Sept 2020

Studying ML to experiment and compare quantum and classical models



Dennis Hwang

South Korea

Into QC since May 2021

Member of Qiskit translating team and studying various Qiskit examples in textbook and documents



Inho Choi

South Korea

Into QC since Sept 2020

Interested in Quantum Hardware for implementation of Quantum Algorithm.



Ginés Carrascal

Spain

Into QC since April 2017

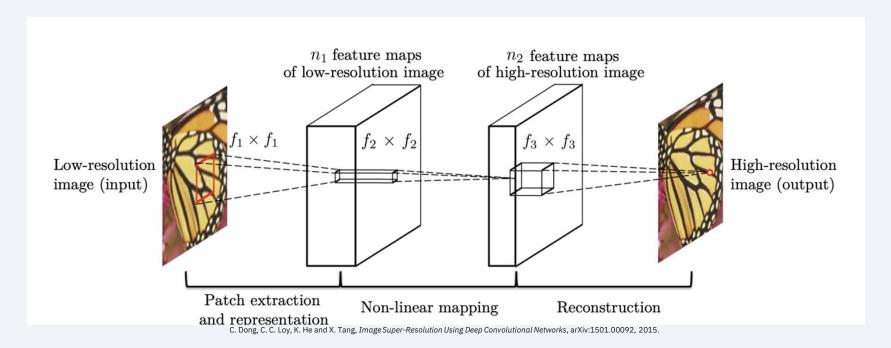
IBMQuantum Ambassador

Searching for business applications of near term QC

Project statement: Image enhancement and resolution filtering



Classical architecture



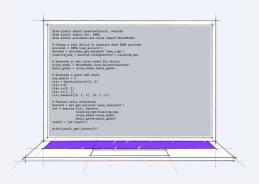
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Deliverable objectives



Technical note

Presenting the problem and explaining how the model is designed and developed



Qiskit textbook chapter

Writing a full presentation to explain how to implement and test the model



Research paper

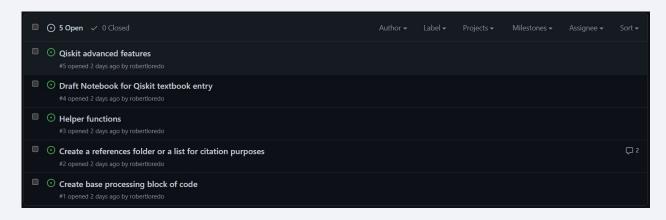
Publish a paper on quantum image processing in a quantum journal

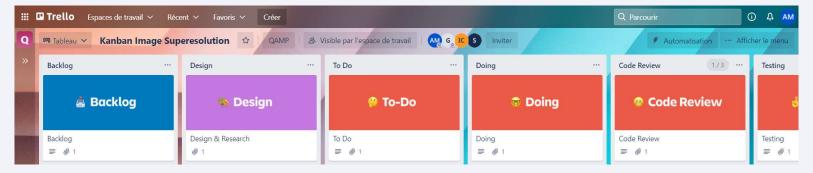


Project updates



GitHub issues and Trello board to organise the work





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