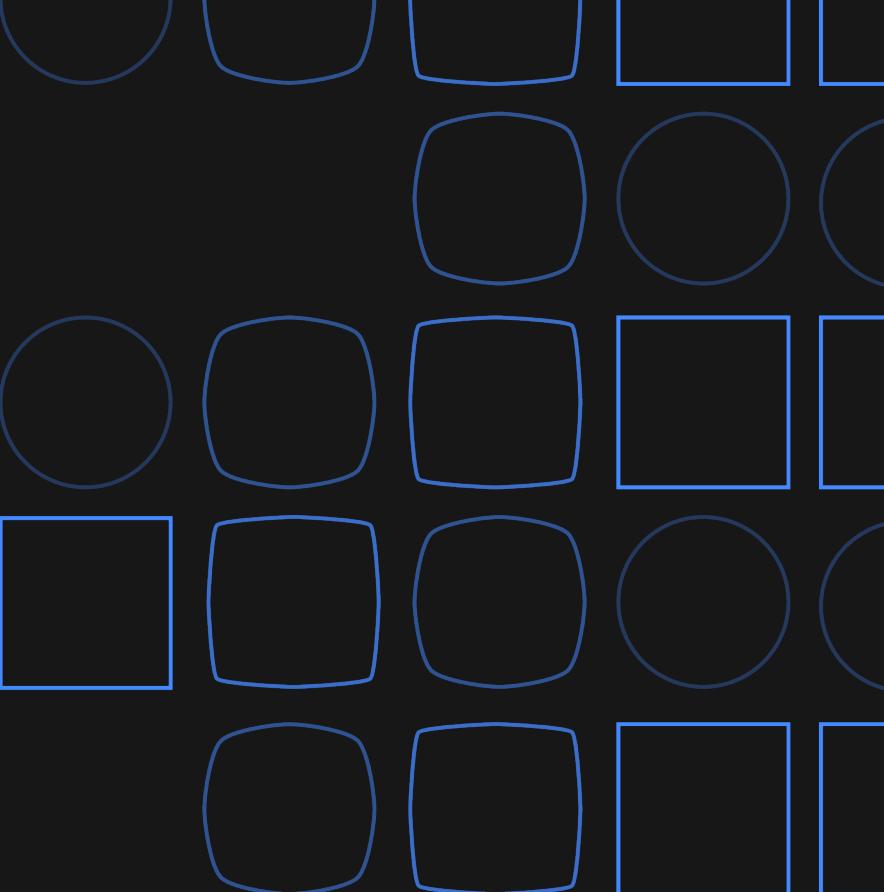


Introduction to Quantum Computing using Qiskit



Workshop staff

Host



Julian Tan - Singapore

Leads



Robert Loredo - USA



Michele Grossi - Italy



Huang Junye - Singapore

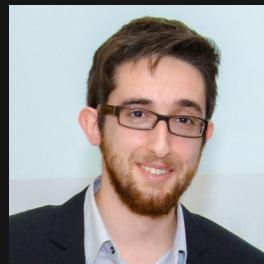
Instructors



Luca Crippa - Italy



Najla Said - Italy



Antonello Aita - Italy

Supports



Jing Yi Chan - Singapore



Kate Marshall - UK



Jennifer Harding - UK

Day 1 Agenda

Start	End	Duration	Subject
10:00	10:30	0:30	Opening and Overview
10:30	11:30	1:00	Introduction to Quantum Computing (The Motivation for Quantum Computing)
11:30	12:00	0:30	IBM Quantum Experience Overview
12:00	12:30	0:30	Lunch break (Webex still on and running)
12:30	13:30	1:00	Backend / Hardware Introduction
13:30	14:30	1:00	Qiskit Quantum Information Science Kit Overview
14:30	15:30	1:00	Qiskit Community
15:30	16:30	1:00	IBM Quantum Experience Circuit Composer
16:30	17:00	0:30	Wrap-Up and Next Day Look Ahead

Day 2 Agenda

Start	End	Duration	Subject
10:00	10:15	0:15	Review and Discussion
10:15	11:00	0:45	Qiskit Terra - Basic Circuits / Visualization
11:00	11:45	0:45	Qiskit Terra - Advanced Visualization, Composite Gates
11:45	12:15	0:30	Qiskit Aer
12:15	13:00	0:45	Lunch break
13:00	13:45	0:45	Qiskit Aqua
13:45	14:30	0:45	Qiskit Ignis
14:30	15:30	1:00	Quantum Algorithms Introduction (Teleportation & Grover's algorithm)
15:30	16:00	0:30	Quantum Finance Tutorial
16:00	16:30	0:30	Quantum Machine Learning Tutorial
16:30	17:00	0:30	Quantum Chemistry Tutorial

Day 3 Agenda

Start	End	Duration	Subject
10:00	10:15	0:15	Review and Discussion
10:15	11:15	1:00	Qiskit Terra Advanced: Open Pulse
11:15	12:15	1:00	Qiskit Terra Advanced: Transpiler
12:15	13:00	0:45	Lunch break
13:00	14:00	1:00	Quantum Algorithms (Quantum Fourier Transform & Quantum Phase Estimation)
14:00	14:30	0:30	Quantum Education
14:30	15:30	1:00	Open Discussion / Q&A
15:30	16:00	0:30	Closing Remarks and Wrap-Up

Housekeeping

- Can always ask question any time in the chat or Q&A panel
- We will answer questions at the end of each section
- During Q&A, please use the raise hand option on Webex, so we can take you off mute and answer in order.
- If we do not get to your question during Q&A, please ask it in the chat. We will be monitoring the chat throughout the entire session.

If you have any questions about the workshop content or face technical difficulty, please contact us:

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