QPrep Workshop
Python programming and linear algebra

Join QAfrica's FREE online workshop:

QPrep16 | Quantum Computing and Programming Workshop

25-27 November 2024

Dive into the basics of quantum computing with a focus on **Python programming** and **linear algebra** in this elementary-level workshop, designed to prepare you for the upcoming **QBronze Workshop** (2-6 December 2024).

What to expect

- **Interactive learning**: Materials are based on the "before-workshop" section of the Bronze-Qiskit tutorial at https://gitlab.com/qworld/bronze-qiskit.
- **Hands-on practice**: Jupyter Notebooks filled with programming tasks for practical experience.
- **Topics covered**: Python programming basics and essential linear algebra concepts.
- **Tools**: Python and the Qiskit library for quantum programming.

Schedule

Monday, 25 November, 18:00 – 20:00 SAST
Python: variables, lists, and conditionals

Tuesday, 26 November, 18:00 – 20:00 SAST
Python: loops and functions

Wednesday, 27 November, 18:00 – 20:00 SAST
Linear Algebra: vectors, matrices, dot product and tensor product

Key requirements

- This workshop is open to everyone interested in quantum computing.
- Educational materials, lectures, and mentoring will be in English, with additional mentoring available in select other languages.
- Familiarity with at least one programming language. If you're new to Python, ensure you familiarise yourself before the workshop.
- Participants will work individually on two main sections: Python Review and Basic Math.

Homework & Certification

- Homework comprises five assignments (100 points in total) – to be submitted via QWorld Canvas.
- Earn at least 50% in each homework submission and score a minimum of 70 points overall to receive a diploma.

Secure your spot and start your quantum journey today!
Apply at https://qworld.net/qprep16/ before 25 November 2024.

Need more info?
Visit https://qworld.net/qprep16/ or email qafrica@qworld.net

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Quantum Research Group
of Stellenbosch University

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