NITheCS
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NITheCS MICRO-SCHOOL:

Introduction to NumPy - Powering Your Data with Efficient Array Operations

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Wed, 26 June 2024 | 14h00-14h30 SAST
Attend online

ABSTRACT

In the realm of scientific computing and data analysis, having a powerful and efficient tool for numerical operations is crucial. NumPy, a fundamental library for array processing in Python, provides this power and efficiency. This presentation will introduce NumPy arrays, highlight their core functionalities, and compare them with Python lists. In this micro-school, we will cover essential topics such as array creation, indexing, and slicing. Attendees will learn how to leverage NumPy for performing fast, complex mathematical operations, enabling them to handle and analyse data more effectively. The goal is to equip participants with the knowledge to use NumPy as a cornerstone for their data-driven projects.

BIOGRAPHY

Omid is a second-year international PhD student in the Quantum Research Group at Stellenbosch University, under the supervision of Prof Francesco Petruccione. His research focuses on Quantum Biology, an emerging interdisciplinary field that investigates the potential role of non-trivial quantum mechanical effects, such as quantum coherence, entanglement, superposition, and quantum tunnelling in describing some biological phenomena inside living organisms.

Omid earned his BSc from the University of Guilan and his MSc from Isfahan University of Technology in Iran, both in theoretical physics. He is actively involved in promoting quantum computing as a co-founder of QSouthAfrica and QIran and is also a Qiskit Advocate.

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