M I C R O - S C H O O L

NITheCS
National Institute for
Theoretical and Computational Sciences

Introduction to cProfile with Python

Eleanor Kedem (University of Cape Town)

Friday, 27 September 2024 | 12h00-12h30 SAST
Attend online

ABSTRACT

cProfile is a built-in Python module that serves as a deterministic profiler, tracking the performance of Python code by collecting detailed statistics about function calls. It records how many times each function is called, the time spent in each function (both inclusive and exclusive of sub-functions), and how much time is consumed overall by your program. This makes cProfile an essential tool for developers looking to identify bottlenecks, improve performance, and optimize their code, as well as for benchmarking. This presentation will dive deeper into the powerful features of cProfile for performance optimization and benchmarking. We will explore different techniques for integrating cProfile into your development process, examining how to generate, analyze, and interpret profiling data.

BIOGRAPHY

Eleanor is a third year MSc student in the University of Cape Town, at the AI program. Her research focuses on quantum inspired algorithms, in particular quantum inspired annealing, which is a version of the classic simulated annealing algorithm inspired by quantum annealers. She is supervised by Prof Francesco Petruccione, Prof Tommie Meyer and Prof Ilya Sinayskiy.

Eleanor earned her BSc in computer science from the Academic College of Tel Aviv-Yafo, and continued to advanced courses in algorithms and AI, focusing on methods like NEAT, evolutionary algorithms and approximation algorithms. She also holds an LLB from Tel Aviv University.

REGISTER: https://bit.ly/3XWNcyE

science & innovation
Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA

NRF
National
Research
Foundation

Stellenbosch
UNIVERSITY
IYUNIVESITHI
UNIVERSITEIT