Willie Loftie-Eaton

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About

Computer Science graduate from Stellenbosch Univeristy. In my undergraduate studies, I gained experience with a variety of programming languages (Java, C, Python, HTML & CSS, React.js and some x86 assembly). This year, I'm doing my honours in computer science, focusing more on data science, studying machine learning and computational intelligence (particle swarm optimization and evolutionary computation). I want to have a productive career, and I'm eager to work hard and learn a lot in 2026.

Education

BSc **Stellenbosch University**, Computer Science (General Stream) — Stellenbosch, WC, RSA · Feb 2021 – Nov 2024
Average of 60%
- Had modules covering computer science (DSA, Computer architecture, Web development, Introductory databases, Networks, Concurrency, Software engineering, AI, ML, Automata theory), mathematics (calculus, linear algebra, abstract mathematics), applied mathematics (graph theory, cryptography), operations research (queuing systems), and statistics.

Matric **Curro Windhoek Gymnasium**, High School — Windhoek, Namibia · Jan 2016 – Nov 2020
Math 1; Computer Studies 2; Physics 2; Business 2; Afrikaans (1) 3; English (2) 3

Experience

Kingly Clark, Summer Intern — Stellenbosch, WC, RSA · June 2024 – July 2024
Wrote e2e tests for a React Native application using Jest. I also worked with Docker during this internship.

Projects

cilpy — Feb 2025 – present
A computational intelligence library written in Python for studying nature inspired algorithms.
- Will be opensourced by the end of the year.

Skills

Programming: Proficient in Python, C, and Java. Familiar with HTML, CSS, and React.js

Mathematics: Good understanding of calculus and linear algebra, and an elementary understanding of statistics

Languages: English (fluent), Afrikaans (native)

Research

Particle Swarm Optimization for Large Scale Optimization Problems — Apr 2025
Authors: *Willie Loftie-Eaton*
github.com/willieloea/ci_research/blob/main/pso_for_lsop.pdf ↗

Programming Patterns: Continuations and monads — May 2025
Authors: *Liam Abbott, Willie Loftie-Eaton*
github.com/willieloea/research/blob/main/monads_in_c.pdf ↗

Extracurricular Activities

- Started and lead the SU Developer Society ↗ and organised a cross country running competition in 2022.