Willie Loftie-Eaton

Stellenbosch University ✉ willieloea@gmail.com 📞 071 494 3857 🔗 willieloea.github.io

in willieloea   willieloea   𝕏 willieloea

About

Computer Science graduate from Stellenbosch Univeristy. In my undergraduate studies, I gained experience with a variety of programming languages (Java, C, Python, SQL, 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
60% average overall, 65% average for computer science modules.   Feb 2021 – Nov 2024

- 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
Math 1; Computer Studies 2; Physics 2; Business 2; Afrikaans (1) 3; English (2) 3   Jan 2016 – Nov 2020

Experience

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