

Willie Loftie-Eaton

📍 Western Cape ✉ willieloea@gmail.com ☎ 071 494 3857 🔗 willieloea.github.io 🌐 in x willieloea

About

I am a Computer Science graduate from Stellenbosch University. In my undergraduate studies, I gained experience with a variety of programming languages (x86 assembly, C, Java, Python, SQL, HTML & CSS, and React.js). In 2025, I pursued an honours in computer science, focusing more on 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, either as a software engineer or machine learning engineer.

Education

BSc Hons Computer Science, Stellenbosch University 2025
Took modules covering **machine learning** (Dimensionality Reduction, Classification, Hidden Markov Models), **computational intelligence** (Particle Swarm Optimization, Genetic Algorithms), **artificial intelligence** (Prolog, Problog, Reinforcement Learning), **automata theory** (Church-Turing Thesis), and **advanced algorithms**.

BSc Computer Science, Stellenbosch University 2021-2024
60% average overall, 65% average for computer science modules.
Took modules covering **computer science** (DSA, Computer Architecture, Web Development, Databases, Networks, Concurrency, Software Engineering), **mathematics** (Calculus, Linear Algebra, Abstract Mathematics), **applied mathematics** (Graph Theory, Cryptography), **operations research** (Queuing Systems), and **statistics**.

Matric, Curro Windhoek Gymnasium High School 2016-2020
Math 1; Computer Studies 2; Physics 2; Business 2; Afrikaans (1) 3; English (2) 3

Experience

Kingly Clark, Summer Internship June 2024
Wrote e2e tests for a React Native application using Jest. I also worked with Docker during this internship.

Projects

[cilpy](#)
A library for computational intelligence researchers to study diverse and complex problems, including multi-objective and dynamically constrained optimization problems.

[flashcards_wle](#)
A flashcards app that allows users to create markdown flashcards. The goals of this app are to 1. help me learn various topics, and 2. serve as a proving ground of my abilities for businesses interested in hiring me as a software engineer.

Research

Willie Loftie-Eaton. [Particle Swarm Optimization for Large Scale Optimization Problems](#).
Liam Abbott and Willie Loftie-Eaton. [Monads in C](#).
In the future, I will continue to upload reports of personal research here: github.com/willieloea/research.

Skills

Programming: Proficient in Python, C, and Java. Familiar with Linux, Docker, Git, SQL, HTML, CSS, and React.js.
Mathematics: Good understanding of calculus and linear algebra, and an elementary understanding of statistics.
Languages: English (native), Afrikaans (native).

Extracurricular Activities

Started and lead the [SU Developer Society](#) and organised a cross country running competition in 2022.