

Willie Loftie-Eaton

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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

<u>cilpy</u>	A library for computational intelligence researchers to study diverse and complex problems, including multi-objective and dynamically constrained optimization problems.
<u>flashcards_wle</u>	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.