

Alexander Westley

DETAILS

Stellenbosch, South Africa

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ajwestley.me

<https://github.com/AJWestley>

SKILLS

- Python Programming
- Java Programming
- C/C++ Programming
- HTML/CSS/JavaScript
- SQL
- Git
- Advanced Maths
- Advanced Physics

EDUCATION

BScHons Computer Science – Stellenbosch University (2024 - Present)

BSc Computer Science – Stellenbosch University (2021 - 2023)

National Senior Certificate – Maritzburg College (2016 - 2020)

WORK EXPERIENCE

Teaching Assistant – Stellenbosch University (June 2023 - Present)

I oversee the tutorial sessions for various Computer Science modules, assisting and teaching the students where they require.

Software Developer Intern – netVendor (Jan 2024 – Feb 2024)

I worked in the netVendor software team and developed an analytics module (Pandas & Flask) for their meter data as well as helped to integrate a push notification API to their PWA (C# .Net Core).

PROJECTS

Cellular Automaton for a Two-Lane Highway System

Using both Python and C, I simulated a two-lane highway to investigate how the effect of a road bottleneck can be mitigated.

The highway system was simulated with a two-lane variation of the Nagel-Schreckenberg model.

Ideal and Non-Ideal Gas Simulation

Using Python, I wrote a simulation to visualize gases with interacting and non-interacting particles.

The simulation uses a spatial hash-map for collision detection and models each particle in the 2D space as a circle.

Portfolio Website

Using HTML, CSS and JavaScript I designed my own portfolio website.

The website is accessible from the link under "Details".

CERTIFICATIONS

Data Science: Analytics – Codecademy (2023)