

# Aaron M. Myburgh

SOFTWARE ENGINEER · MECHANICAL ENGINEER

Cape Town, South Africa

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## Skills

- Programming** C/C++, Git, JavaScript, React, HTML, CSS, Node.JS, Express.JS, SQL, AWS
- Mech Eng** Autodesk Inventor, Solidworks, Finite Element Analysis (FEA), Electronic Automatic Control Systems (Siemens PLC's)
- Cyber Security** Nmap, openVAS, Metasploit, EnCase, WinAudit, Helix, Paraben's P2 Commander

## Projects

### Fractal Generator

STUDENT @42 SILICON VALLEY

- Created a graphical fractal generator application in C that dynamically re-renders upon user interaction. Implemented efficient multithreading using band threading for speed optimization. Utilized a custom graphics library named miniLibX, built on OpenGL, for graphics rendering, and integrated Apple's Appkit for seamless handling of mouse and key inputs/hooks.

### ft\_printf

STUDENT @ 42 SILICON VALLEY

- Developed a custom implementation of the printf function, incorporating various standard flags and color functionality. Acquired proficiency in handling variable arguments in C and demonstrated the ability to recognize and manage different data types from user input.

### Tetris Fill It

STUDENT @ 42 SILICON VALLEY

- Created a program in C that accepts standard Tetris pieces from either a plain text file or standard input, validates the input, and arranges the pieces in the smallest possible configuration. Implemented a recursive backtracking algorithmic technique to achieve this functionality.

## Education

### 42 Silicon Valley

San Francisco Bay, CA

SOFTWARE ENGINEERING STUDENT

Apr. 2018 - Sep. 2019

- 42 Silicon Valley operates as a project-centric coding bootcamp centred on the core principles of software engineering. The course's collaborative learning approach not only cultivates technical proficiency but also enhances communication and teamwork.

### De Anza College

Cupertino, CA

SUPPLEMENTARY COURSE WORK WHILE ATTENDING 42

Sep. 2018 - Jun. 2019

- C++, Unix/Linux, Ethical Hacking, Digital Forensics

### NMU(Nelson Mandela University)

Port Elizabeth, South Africa

BACHELORS OF TECHNOLOGY: MECHANICAL ENGINEERING

Graduated Dec. 2016

- Acquired a solid understanding of mechanical systems, thermodynamics, and fluid dynamics.
- Experience with CAD software and mechanical design principles.

## Experience

### Commercial Property Manager

Eastern Cape, South Africa

MANAGING DAY-TO-DAY OPERATIONS

Jan. 2020 - Dec. 2024

- Managed operations of commercial properties, overseeing leasing activities, and ensuring tenant satisfaction.
- Implemented cost-effective property improvements, successfully handled tenant concerns, fostering positive relationships and optimizing property performance.

### Mechanical Design Engineer

Port Elizabeth, South Africa

NMU FORMULA STUDENT RACING TEAM (DESIGN, BUILD AND RACE FORMULA STUDENT CARS)

Jun. 2013 - Nov. 2014

- Designed and implemented composite components that achieved a weight reduction of up to 30% through the integration of varied tread orientations and the layering of carbon fiber, enhanced by vacuum pressure curing.
- Delivered training sessions to onboard new team members and earned the nomination for the position based on demonstrated performance.