# Teveshan Valaitham

t.valaitham7@gmail.com

Durban, KwaZulu-Natal, South Africa

ฏิ<sub>=</sub> 9903085403083

github.com/teveshanV

+27 (0) 61 483 4485

in linkedin.com/in/teveshan-valaitham

Code B Driver's License

teveshanv.github.io/portfolio/

## **PROFILE**

A BSc (Honours) graduate aiming to secure a challenging role as a software engineer where I can utilize my strong technical background in electrical engineering and my passion for programming to contribute to the development of innovative software solutions. Despite my lack of professional experience, I am eager to apply my knowledge and skills to make a meaningful impact in the industry.

## **EDUCATION**

#### The University of Kwa-Zulu Natal | Durban, South Africa

2017 - 2023

Bachelor of Science (Honours) in Electrical Engineering.

Key Modules: Electrical Principles, Computer Methods, Engineering Mathematics, Embedded Systems, and Digital Systems.

Dissertation: Design and Simulation of a Micro-turbine power generation system.

# Mountview Secondary School | Verulam, South Africa

2012 - 2016

Bachelor's Pass (4 A's).

2016

Subjects: Mathematics, Information Technology, Accounting, English, Life Orientation, Physical Sciences, and Afrikaans.

#### **CERTIFICATES**

#### freeCodeCamp:

- 1. JavaScript Algorithms & Data Structures 2023.
- 2. Responsive Web Design: HTML & CSS 2023.

#### **Great Learning:**

1. .NET Fundamentals – 2023.

**Shantik Foundation**: Skills Development Graduate (Electrical) – 2023.

#### **ACHIEVEMENTS**

- 2x winner of the Thebe Foundation Scholarship Fund (2020 and 2021).
- Mountview Secondary class RCL.
- "A" aggregate achievement in Matric.

#### SOFTWARE PROJECTS

- Pharmacy, Car Rental, and Music store projects built in NetBeans using Java and a database. Utilised OOP, SQL, and a graphical user interface to complete various tasks such as storing/modifying/deleting users and staff members, creating receipts, generating pie charts and graphs, and using accounting equations to determine if the business is running a profit or a loss.
- Created a multi-meter that is able to measure current, voltage, resistance, and power by creating an embedded system using an Arduino microcontroller coded with C++.

- Ping-pong game, live number of students currently in a classroom, light pattern, and an intrusion alert system was made using Assembly and a microcontroller (ATmega-32).
- Designed and developed a micro-turbine power system capable of powering a small office using MATLAB/Simulink in either stand-alone mode or hybrid (in tandem with grid power to save on energy costs).
- Developed apps using HTML, CSS, and JavaScript Space Invaders, Weather app (using the OpenWeather API), tic-tac-toe game, recipe website, to-do list, and random quote generator.

#### **SKILLS**

**Languages**: English (native), Zulu (elementary), and Tamil (elementary). **Microsoft Office**: Proficient in Word, PowerPoint, Excel, and Outlook.

**Software Development**: Proficient in Java, C, C#, .NET Framework, Python, SQL, MATLAB, JavaScript, HTML and CSS. Familiar with Assembly. Experienced in object-oriented programming (OOP), data structures and algorithms.

**Other**: Visual Studio Code, microcontroller programming, embedded systems, system modelling, lightroom, NetBeans, PyCharm, Atmel Studio, MATLAB/Simulink, MS SQL Studio, and technical drawing in AutoCAD.

#### **VOLUNTEER WORK**

- Thebe Foundation spokesperson.
- Annual local Diwali hamper drive.
- Social upliftment, Walk for Values.
- Social upliftment, free programming lessons to the neighbourhood.

# **HOBBIES**

- Developing apps. I enjoy developing software applications for desktop platforms that are available to view on my portfolio website.
- Weekly indoor football. Playing indoor football has helped me develop skills such as teamwork, communication, and leadership.
- Photography. I enjoy taking photographs in my free time, particularly landscapes and portraits.
- Writing short stories. My preferred genres are science fiction and fantasy, and I have participated in online writing communities to receive feedback and improve my skills.