Julian Banks • 081 845 3640 • julianrowlandbanks@gmail.com

Education

University of Cape Town

Bachelor of Science in Engineering in Mechatronics ... 2023

Final year GPA 82.9%

- Dean's Merit List
- Class Medal: Energy Conversion 2 (EEE4117F) - 92%
- Research Project: Intelligent energy management scheme of a hybrid microgrid using machine learning

Rondebosch Boys' High School ... 2018

Academic Distinction, NSC average: 90.7%

Deputy Head Boy

Technical Skills

- Renewable Research
- Control Theory
- Automation & SCADA
- Embedded Systems
- React JS
- MATLAB
- Machine Learning
- C++
- Soldering
- Welding
- Electronics
- Power Electronics

Professional Experience

Think Camp ... Live online coding classes

Code Tutor & Tutor Trainer ... Aug 2020 - Present

- Teaching the fundamentals of code to young children in a fun, interactive online class
- Training new tutors over a 10-week training program
- Being a part of the company as we have expanded from 150 to 600 students
- Skills: Coding, teaching, employee training, power of feedback

ThingKing ... Interactive electronic installations

Freelance Electronic Specialist ... 2022 - Present

- Contributed to design and manufacture of lighting installations for Adidas
- Assisted with the fabrication of a Lipton activation.
- Skills: electronic debugging and diagnoses, embedded electronics design and manufacturing

Centre for Renewable and Sustainable Energy Studies ... Renewable research centre

Vacation work intern ... July 2022

- Handled a pre-feasibility report for the installation of solar at a residential building
- Modelled the solar energy production using HOMER Pro

Moths Incorporated ... Event lighting solutions

Co-founder ... 2022 - Present

- Coordinating with my partner, we designed, iterated and tested an events lighting system
- Programmed an interactive lighting system using C++
- Assembled an embedded system solution to control the system

Jou Ma Se Soil ... Indoor plant potting soil

Co-founder & Web developer ... 2020 - 2022

- The sole developer for our website, programmed in React JS, using a Heroku database
- Visualised and realised a completely sustainable product

Certifications

- Ignition 8.1 Inductive University (SCADA software) ... 2023
- Machine Learning with Matlab ... 2023
- The complete Web developer: Zero To Mastery ... 2023