Sameer Shaboodien

Tertiary Education

Stellenbosch University (2021-present)
> Electrical and electronic engineering
> Received the Dell Young Leaders Scholarship
> Golden Key member following a top 15% faculty placement.
> Awarded Dell Young Leader bursary.

High School

Bishops Diocesan College (2016-2020).
> Full academic colors (sustained 85% average).
> 11th in the national Allan Gray Entrepreneurship Challenge (2018).
> Top 10 in the Western province for grade 12 economics
> 90% average in grade 12.

Public Service

> Vice-Chairman of the community service society at Bishops, leading and organizing large public and intercommunity events alongside my team.
> Worked on the "24-hour Cyclathon" at the V&A Waterfront, successfully raising over R250,000
> Completed over 150 hours of community service.
> Recipient of the Gold President's award.

General Experience

> Bishops' equality committees. Actively participated in organizing speeches, negotiating with management, and encouraging students to voice their concerns regarding offenses.
> 1 year of university tutoring through various organizations
> 1 year with Genius Premium Tuition, a comprehensive tutoring company, collaborating with a large team to evaluate and manage the objectives and overall well-being of tutees.

Skills

> Languages: English, Afrikaans, French
> Skilled in C, Java, and Python.
> Equity trading, Achieved a 25% profit in my best year.
> Courses and work in Adobe: Illustrator, Photoshop, premier pro, audition.
> Awarded half colors for debating.

Sport

> Western Province in judo and indoor cricket.
> First-team high school hockey
> A-team club and school soccer

Engineering Experience

29 June – 10 July 2023: Octoco
Role: Electrical Engineer - Internship

- **Achievement:** Awarded a performance bonus for outstanding completion of my project.
- **Decrypted Metering Protocol:** Deciphered a large, discontinued electricity meter's protocol, without any working experts in the country, and created custom interfacing software to allow to integrate other hardware.
- **Skills Developed:** Deciphering a complex array of encoded communications with near no support proved beneficial to my problem-solving ability and grit. I gained a well-rounded expertise in protocol theory and reverse engineering.

11 – 13 July 2023: Octoco
Role: Hardware Analyst – Contract Work

- **Hardware Debugging:** Resolved hardware maintenance issues on over 100 PCBs on an international agricultural project. This included pinpointing recurring issues caused by design flaws.

11 – 15 September 2023: Octoco
Role: Software Developer and Junior Electrical Engineer - Contract Work

- **Wireless Meter Interface:** Made improvements to software in C. The software allowed high-reliability interfacing with over 200 GSM modems placed in the electricity meters. My work involved clearing some software bugs and refactoring the code. This required a foundational understanding of GSM modems and wireless communications.
- **Hardware Error Analysis:** Resolved an issue whereby random bit streams were entering communications due to interference between meters.

23 November 2023 – 7 February 2024: Lantern Engineering
Role: Junior RF software engineer - Internship

- **Unit Testing:** Used software tools to unit test on and gain coverage over a large radio project.
- **IOT integration and debugging:** Integrated a Raspberry Pi with an array of IOT MATTER devices locally. Identified an EMI protection flaw.
- **Environment setup:** Researched and wrote software to drive UART and I2C on an older, poorly supported IDE and chipset, to meet project specifications.

Additional links

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Sameer Shaboodien

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