BENJAMIN SCHWARTZ

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EDUCATION

University of New South Wales (Sydney, Australia) **February 2020 – August 2024**

B.E. in Computer Engineering (Honours)

- Current WAM/GPA 85.00 (HD Average)
- Deans Honour's List (Highest achieving students in Faculty of Engineering).
- Year-long exchange at *EPFL* (Lausanne, Switzerland), taking Master's and bachelor's courses in software and hardware, with particular focus on FPGA Design. Maintained high average grades in all courses at a leading technical university.

Sydney Grammar School (Sydney, Australia) **February 2010 – September 2015**

Higher School Certificate

- Recipient of a 99.65 Australian Tertiary Admissions Ranking (maximum, in top 0.35% of 77,000+ candidates).
- HSC All Rounder, HSC Top Achiever in Classical Greek Continuers (4th in NSW) and Classical Greek Extension (3rd in NSW).
- HSC Distinguished Achiever (Band 6) across all subjects.

EXPERIENCE

IMC Trading (Sydney, Australia) **November 2023 – February 2024**

Software Engineering Intern – Trading Execution

- Working on designing and implementing low-latency high frequency trading systems in C++.
- Migrated a configuration framework from Java to C++. Contributed to a complex and mature codebase.
- Collaborated in a team environment, developed skills in code review and CI/CD development.

Quantium (Sydney, Australia) **December 2021 – February 2022**

Data Analytics Software Engineering Intern – WooliesX E-Commerce Forecasting

- Worked on creating forecasting models through manipulating large datasets to develop useful features.
- Analysed patterns and correlation between store location and proximity to major cities and sales data.
- Contributed to workflow of a professional team, gained exposure to AGILE framework.

Academic Tutor (Sydney, Australia) **January 2020 – July 2022**

HSC Academic Tutor – Lindfield Learning Hub & Privately

- Extension-level Mathematics, Chemistry and Physics tutor both privately and as part of an organization.

RECENT PROJECTS

CellSim Thesis project: Full-stack development of a web-hosted editing and visualization tool for CellML models. Dual-server architecture (backend in C++using Mongoose, frontend with VueJS).
CNN Accelerator (FPGA Design): Used Vitis High-Level Synthesis (HLS) and Vivado to achieve 10x speedup of CNN process. Focus on architecture of SW-HW co-design of embedded systems. Use of HLS as a productivity booster for design of HW components.
Game of Life (Conway) in Assembly using NIOS II Processor: Complete program in VHDL using Gecko4Education board.

SKILLS AND INTERESTS

Programming Proficiencies Strong in C++, Proficient in Rust, Web (JS / HTML/ CSS), Java; Some Go.
Sydney Grammar School 1st XV, 1sts Basketball, Swim Team (2018-2019) (Captain and Vice-Captain)
Interests in backend system development, C++, Trading and Financial markets