Dante Crescenzi

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EDUCATION

University of Toronto

Toronto, ON

B.A.Sc in Computer Engineering

Sept 2020 - June 2025

- Maintaining a 3.98/4.0 Cumulative GPA and 94% Cumulative average
- Awarded Dept. of Electrical and Computer Engineering Top Student Award (2020/21, 2021/22, 2022/23)
- Received Charles Edwin Trim (2022), 2 x Wallberg Undergraduate (2021, 2022) Scholarships

EXPERIENCE

FPGA Software Engineer Intern

May 2023 - Present

Intel

Toronto, ON

- Worked within the Synthesis team of the Quartus Prime compiler developing high-performance C++ to contribute to increasing Fmax and lowering area through the application of diverse netlist optimization techniques.
- Identified and optimized an inefficiency within a section of the Synthesis flow through usage of profiling and benchmarking tools, leading to a 10x speedup in section runtime.
- Implemented a system within the Quartus Prime compiler flow to identify missed optimizations caused by user constraints, enabling efficient detection of problem areas hindering Fmax.

Software Developer Intern

 $May\ 2022-Sept\ 2022$

Oracle

Remote

- Contributed to the successful development and launch of Oracle's new ERP service, NetSuite Next, by playing a key role in various aspects of its construction.
- Helped design and implement document transformation flows between various financial records as a member of the Order-To-Cash team at NetSuite.

Software Engineer Intern

May 2021 – Sept 2021

PointClickCare

Remote

- Led a comprehensive refactoring initiative to streamline the connection interface between testing infrastructure and relevant databases, resulting in a significant simplification of 120+ unit tests and improved code readability.
- Collaborated with a team of testing automation engineers to elevate the team's repository test coverage from 81% to 97%.

VP Web Devlopment

Feb 2021 – Present

UofTHacks

Toronto, ON

- Assumed leadership of the web development team at UofTHacks, Canada's largest student-run hackathon, overseeing and coordinating the successful execution of web development projects.
- Designed and implemented a QR identification system for automating hackathon check-in, event attendance tracking, meal credits, and other key functionalities at UofTHacks.

PROJECTS

Geographic Information System with C++

2022

- Developed a GIS using C++, incorporating advanced features and functionalities inspired by Google Maps. Optimized software for high performance and built custom front-end.
- Implemented a suite of graph algorithms and heuristics, including simulated annealing, to optimize the solution of an NP-Complete problem, Travelling Courier.

Custom Processor - FPGA & Physically Prototyped Implementation

2022 - Present

- Designed and developed a custom 16-bit RISC processor with Verilog, to be implemented on an FPGA.
- Embarked on a hands-on approach to further enhance understanding and proficiency by implementing the processor with discrete components on breadboards, inspired by the Verilog implementation of the processor.

TECHNICAL SKILLS

Languages: Modern C++, C, Python, Verilog, ARM v7 Assembly, Java, JavaScript, SQL

Software/Hardware Courses: Algorithms & Data Structures, Operating Systems, Computer Networking, Software Design, Computer Organization, Digital Systems, Intro to Deep Learning

Math Courses: Probability, Multivariable Calculus, Linear Algebra, Complex Analysis & Differential Equations