Dante Crescenzi

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Experience

Incoming Hardware Engineer

August 2025

IMC Trading

Chicago, IL

Hardware Engineer Intern

June 2024 – August 2024

IMC Trading

Chicago, IL

- Implemented elements of low-latency trading systems, improving performance, reliability and flexibility.
- Contributed to the development of both software, hardware, and their integration.

FPGA Software Engineer Intern

May 2023 – June 2024

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.
- 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.
- Identified and resolved a 5% runtime increase on the synthesis stage of the Quartus Prime compiler by conducting in-depth analysis and implementing different optimization strategies.
- Developed an internal testing tool aimed at generating randomized designs to rigorously stress test Synthesis optimizations, significantly enhancing the reliability and performance of Synthesis results.

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 test coverage from 81% to 97%.

EDUCATION

University of Toronto

Toronto, ON

Sept 2020 - June 2025

- B.A.Sc in Computer Engineering * 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

PROJECTS

Custom Pipelined Processor - Verilog, Quartus

FPGA CNN Accelerator Utilities - System Verilog, Verilator, Quartus

SmallC Compiler - C++, ANTLR4, LLVM

User-Level Thread Package - C. Linux

Hashtable library for C with Custom Testing Framework - C, Linux, Python

Random HDL design generator for Synthesis stress testing - Modern C++, Various HDLs, Python, Quartus

Geographic Information System with C++ - Modern C++, Gtk, Linux

Technical Skills

Languages: Modern C++, C, SystemVerilog, Go, Python, x86 & ARM v7 Assembly, Java, SQL Software/Hardware Courses: Algorithms & Data Structures, Operating Systems, Computer Architecture, Computer Networking, Compilers & Interpreters, Software Design, High Performance Computing, Digital Systems Math Courses: Probability, Multivariable Calculus, Linear Algebra, Complex Analysis & Differential Equations