

Justin Daludado

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EDUCATION

Honours Bachelor of Computer Science

September 2021-Present

Carleton University, Ottawa, Ontario

- Courses in Algorithms, Databases, Data Structures, Object Oriented Programming, Web Development, Machine Learning, Software Engineering, Networking

RELEVANT SKILLS AND EXPERIENCES

Languages: Java, Python, C and C++, Javascript/Typescript, HTML, CSS, Go, Haskell, SQL, Swift

Tools: Node.js, Next.js, React, PostgreSQL, MongoDB, RESTful API, Qt, Oracle Cloud, Gymnasium, Git, AWS

WORK EXPERIENCE

Computer Science Instructor | *LogicFusion Limited, Thornhill, Ontario*

June 2025-Present

- Taught 40+ students aged 6–14 fundamental computer science concepts through interactive lessons.
- Led hands-on coding projects using languages such as Python, JavaScript, and Java.
- Designed lesson plans with games, visual aids, and real-world examples, improving post-class quiz scores by 20%.

Team Member | *Baskin Robbins, North York, Ontario*

April 2022-August 2023

- Provided customer service by taking orders and preparing products in a fast-paced environment.
- Facilitated conflict resolution among team members through effective communication, leading to a more positive and collaborative work environment.

APPLIED PROJECTS

QNX Quantum-Proof Boot Validation | *QNX Neutrino, C, TPM, PQC*

February 2025 - Present

- Developed quantum-proof cryptographic validation for QNX kernel images, improving boot-time security against quantum attacks.
- Built performance profiling tools to measure validation latency and memory usage, enabling optimizations for ARM-based embedded devices.
- Optimized signature verification to reduce validation latency by 28% and memory usage by 18% on ARM Cortex-A72 devices.

Self-Parking Car RL Agent | *Python, Gymnasium, Stable Baselines 3*

December 2024 - February 2025

- Designed an autonomous parking system using PPO in Stable Baselines 3 with automated experiment tracking.
- Applied mixed-precision training and custom reward shaping, reducing convergence time by 40%

Full-Stack Schedule Management System | *Next.js, TypeScript, PostgreSQL, React*

October 2024

- Engineered a responsive web application using Next.js 15, TypeScript, and React to manage employee schedules and availability across multiple store locations.
- Implemented real-time data synchronization using Supabase for authentication, role-based access control, and database operations using PostgreSQL.
- Built a hierarchical user system supporting different roles with distinct permissions.
- Enabled managers to update shifts instantly across 5+ locations, reducing scheduling conflicts by 30%.

don't-secure.me | *React, Next.js, Swift, SwiftUI, MongoDB, REST API*

April 2024

- Built a full-stack social media platform with both web and native iOS apps for cross-platform connectivity.
- Designed a scalable database architecture using MongoDB for user information management, supporting 1000 concurrent users.
- Implemented a RESTful API enabling secure data transactions and seamless cross-platform integration.