Dorson Tang

Richmond, BC | dorsontang123@gmail.com | linkedin.com/in/dorson-tang | github.com/doruphin

Education

University of British Columbia — *Vancouver, BC*
Bachelor of Science, Computer Science — *Expected May 2028*

- **Related Coursework:** Data Structures and Algorithms, Networking, Computer Systems, Software Engineering
- **Awards/Distinctions:** Dean's Scholar
- **GPA:** 3.90/4.33

Work Experience

Software Developer — *Vancouver, BC*
Ruboss — *May 2025 to Sept 2025*

- Worked to develop the latest iteration of a virtual e-book library from a legacy code base, utilizing various frameworks and technologies such as React Router, Tailwind CSS, and Ruby on Rails
- Created the virtual course reader that is utilized by over **1,000,000** readers, as well as various custom React components used by over **10,000** authors with a focus on reusability and responsive ui design
- Optimized web embeds by ∼**66%** by byte size over network, allowing for lightweight implementation by authors
- Implemented GraphQL endpoints in Ruby on Rails to enable backend data retrieval from MySQL

Software Team Lead — *Vancouver, BC*
UBC Subbots — *Sept 2024 to Present*

- Led **15** developers in the software sub-team of the UBC Subbots engineering design team, developing embedded firmware for autonomous underwater vehicles with a focus on controls system and simulation
- Developed in a Linux Ubuntu environment, utilizing the ROS2 framework written in C++ and Python for autonomous robot control and robot simulation
- Led software efforts to **semi-finals** in the international RoboSub competition with more than **50** schools in attendance

Technical Projects

FretNot - *C++, TypeScript, React, Tailwind* — *Project Link*

- Created a guitar attachment in under 24 hours for Stormhacks 2025 that projects the proper fingering of chords using lasers, which won the **IEEE award** amongst **777** participants
- Developed the ESP32 code and the companion web interface, which allowed for the parsing of song lyrics and chords through the Tesseract OCR to sequentially play and project the chords alongside the song
- Extended Arduino library to incorporate modern C++ standards such as RAII principles and safe data types

Execution Order - *C#, Unity* — *Project Link*

- Ranked in the top **5%** amongst **37,000** participants in the largest game development competition in Itch.io history, the 2025 "Loop" Game Maker's Toolkit Game Jam
- Worked with art and design team to implement various visual effects such as VCR reversing and entity animations
- Implemented a robust window manager system which allowed for easy implementation of level obstacles through efficient use of several pillers of object-orientated programming such as encapsulation and polymorphism

bublstore - *Python, JavaScript, Django, Tailwind* — *Project Link*

- Built a full-stack storefront utilizing the Django framework for backend user information management with a PostgreSQL relational database, alongside a modern frontend built using the Tailwind CSS framework
- Containerized application using Docker to streamline deployment processes and designed a custom automated GitHub Actions workflow to optimize testing, building, and deployment
- Implemented a chatbot using the Ollama-Python library that processes customer queries through a RAG pipeline

Technical Skills

Tools/Frameworks: Linux, React, Node.js, Git/Github, ROS 2, Gazebo, Unity, Swing, Django, PostgreSQL, Docker

Languages: C/C++, C#, JavaScript/TypeScript, Python, Ruby, Java, Racket