Charles W. Wong

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Charlie Wong

Education

University of Waterloo
BASc Candidate | Class of 2026
Computer Engineering

Skills

Languages
- C++, C#, C
- JavaScript, QML, HTML/CSS
- Python, Lua, VHDL

Frameworks, Tools & Platforms
- Azure DevOps
- Microsoft Dynamics
- Qt, Git, JUCE
- Visual Studio, VSCode
- XCode, Quartus Prime

Certification
- Cisco IT Essentials

Design & Organization
- Adobe Creative Cloud
- Asana, Blender
- CucumberStudio

Relevant Courses

Digital Computers (Assembly)
(currently enrolled)

Algorithms and Data Structures
(currently enrolled)

Digital Circuits and Systems

Awards/Achievements

Colonel Hugh Heasley Engineering Scholarship - *2021-Present*
Awarded to outstanding students entering first year engineering, who continue to maintain an average of 80% or higher

University of Waterloo President's Scholarship of Distinction - *2021*
Awarded to students with admission average of 95% or higher

Shad Fellow - *2019*

Experience

National Research Council
Developer | Azure DevOps, C++, JavaScript, Microsoft Dynamics
Sept-Dec 2022 Ottawa, ON
- Developed CRM solutions for the NRC Industrial Research Assistance Program Portal, CanExport, and SONAR360 programs, reaching 8,000+ SMEs across Canada
- Designed and implemented client-requested features
- Created integral testing and data-creation processes for QA team, alongside documentation

Monogram Creative Console
Software QA | Git, JavaScript, Lua, QML/Qt, Adobe CC, Asana
Jan-April 2022 Kitchener, ON
- Evaluated company software integrations with new releases of industry-leading editing software
- Improved test execution time by 5% through enhancement of quality and organization of test cases
- Identified 50+ software bugs with Adobe Creative Cloud integrations and new feature implementations, planned and executed software solutions
- Designed and implemented UI to improve user customizability and utility of company product

Turak Research Group | McMaster Engineering Physics
Research & Developer Intern | C++, Bash
Jul-Aug 2021 Hamilton, ON
- Utilized Sharcnet supercomputer network and GranSim program to simulate and analyze the morphologies of self-assembling organic molecules
- Revised simulation code, recovered and updated programs for use with current equipment
- Developed procedural testing methods

Projects

Secret Radio Safe | C, STM32
- Prototyped microcontroller combination safe
- Designed and assembled hardware and radio housing
- Programmed I/O logic, displays, sounds, and motors

Word Search | Java
- Utilized breadth-first search algorithm for crossword game

Jazz Band Virtual Music Collaborations
- Conceptualized and created audio/visual media products

Lightcube Project | C++
- Assembled and programmed animations for 3D LED array

Spaceship Side Scroller Game | C#
- Programmed game logic, created all game assets