





Ray Adrian Nugroho

Software Developer

 328 Regina Street North
Waterloo, ON N2J 3B7
 (226) 606-4325
 ra2nugro@uwaterloo.ca
 ray-nugroho.github.io

Technical Skills

- **Programming**— Python, C/C++, HTML, CSS, JavaScript
- **Automation tools**— Squish, Robot Framework, Selenium WebDriver
- **Technologies**— Git, Subversion, Qt, Linux, Jenkins, JIRA, TeamCity, Helix ALM, Unreal Engine

Work Experience

Test Automation

JAN 2019 – APR 2019

Christie Digital Systems

Waterloo, Canada

- Revamped existing test processes with more automation by using **Python** and **Qt** to design a tool that queries the status of a projector periodically.
- Fixed bugs and refactored **Squish** test scripts to improve correctness, efficiency, and clarity.
- Implemented an API call method that clears logs in a Raspberry Pi.

Software Developer

MAY 2018 – AUG 2018

Klashwerks

Ottawa, Canada

- Automated a regression test with **Robot Framework** to maintain the correct compatibility of Klashwerks' products and the on-board diagnostic.
- Developed unit and integration tests by using **Google Test** and **Robot Framework**.

Software Engineer

APR 2017 – DEC 2017

Peraso Technologies

Toronto, Canada

- Developed a test script in **JavaScript** to emulate a long-distance signal travel using a 60G attenuator.
- Assembled test setups to check the interoperability of Peraso and WiGig products in a plugfest event.
- Designed a unit test in **C++** for a program that executes the finite-state machine.
- Built **Python** scripts to generate various dashboard graphs for showing performance test results.

CS 115 Instructional Support Assistant

AUG 2016 – DEC 2016

University of Waterloo

Waterloo, Canada

- Held weekly tutorials to provide **Racket** programming reviews for a class of 50 students.

Side Projects

Chess Project (C++)

NOV 2015 – DEC 2015

- Used the **observer pattern** to develop a chess game with a playable **AI** and save/load game features.

Chamber Crawler Project (C++)

JUL 2016

- Designed a combat system between the player and AI-controlled enemies with the **visitor pattern**.
- Utilized the **decorator pattern** to implement different types of enemies and player characters.

Education

Bachelor of Mathematical Economics (with Computer Science Minor)

SEP 2014 – APR 2020

University of Waterloo

Waterloo, Canada

Courses:

- CS 246: Object-Oriented Software Development
- CS 338: Computer Application in Business: Database
- CS 234: Data Types and Structures
- CS 436: Network and Distributed Computer Systems

Activities and Interests

Online courses:

- Selenium WebDriver with Python 3.x
- Game development with Unreal Engine C++
- Web Developer Bootcamp (HTML, CSS, and JavaScript)