Roy Lu

Hon. Bachelor of Science

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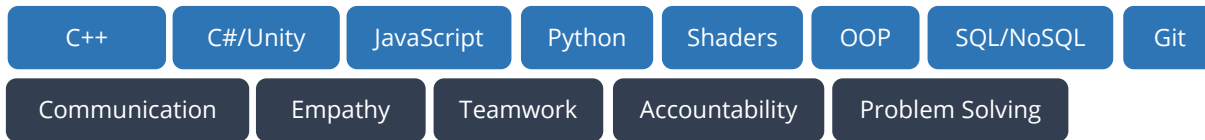
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LinkedIn: linkedin.com/in/roylu01

GitHub: https://github.com/hylu-dev

Portfolio: hylu.dev

SKILLS

C++ | C#/Unity | JavaScript | Python | Shaders | OOP | SQL/NoSQL | Git

Communication | Empathy | Teamwork | Accountability | Problem Solving

EXPERIENCE

QA Analyst Intern (16 Months) - *Proofpoint / Toronto, ON / 2020-2021*
- Perform manual backend Linux server testing for an email security SaaS product
- Spearheaded testing efforts for backend AWS testing
  - Lead meetings and propose testing solutions for incoming features
  - Develop multi-threaded performance testing solution using Python and Linux tooling
- Write programs and scripts to improve test coverage and efficiency
  - Customizable **.NET** tool to send bulk emails, configurable with JSON. Improved testing times by more than double previous methods
  - Web extension to bulk manage virtual machines automated 10-minute hands-on work into a 2-minute single click

EDUCATION

COMPUTER SCIENCE – HONOURS BACHELOR OF SCIENCE

University of Toronto (Mississauga Campus) / 2017 – 2022

Relevant Courses: Software Engineering, Algorithm Design, Database Design, Web Programming

Involvements: Web Developer for multiple student organizations including the *Digital Enterprise Management Association* and *Institute of Communication, Culture, Information, and Technology Council.*

GAME ADVANCED PROGRAMMING – CURRENT

Sheridan College (Trafalgar Campus) / 2023 – 2024

Relevant Courses: Game Architecture, Graphics Programming, Game Engine Fundamentals

PROJECTS

PianoTypes (2023) - *SvelteJS/HTML/CSS* https://github.com/hylu-dev/pianotypes
- Web-based virtual piano with note visualizer and minimal, sleek interface
- Supports multiple instruments with fully customizable controls
- Support real-time midi playback with media controls
- AI music generation using **MagentaJS** to play music in the style of any midi song

Bujots (2022) - *ReactJS/ExpressJS /MongoDB/TypeScript* https://github.com/hylu-dev/bujots
- Web-based jot note app inspired by bullet journaling to create organized online notes
- Notebooks are registered per user and served through **REST API** with token authentication
- State managed through **Redux** to track note and image edits and employ autosaving
- UI built with **TailWindCSS** and **Framer Motion** for responsive layouts and animations