

Allen Gao

Computer Science

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SKILLS

Languages: Proficient: C++, C, TypeScript, JavaScript | Experienced: Bash, C#, Java, Golang

Frameworks: Mocha, Spring Boot

Tools: Git, Vim, Node.js, MongoDB, Azure DevOps

EXPERIENCE

Software Developer, *Acentury* ☑ 08/2020 | Richmond Hill, Canada

- Developed and maintained a **Node.js** library with **TypeScript** to parse, flatten, and authenticate **JSON Schemas** as inputs and outputs to function blocks
- Designed a single sign-on scheme using **Keycloak's Spring Security Adapter**, **Java** and customized authentication workflow to support Telus LDAP
- Automated deployment process by developing a CI/CD pipeline with **Azure DevOps**
- Expanded testing coverage by designing automated jobs to run **Mocha** tests

PROJECTS

CC3k, C++

- Developed a dungeon-crawling game with multiple character and enemy races, custom map layouts, and interactive gameplay
- Utilized **object-oriented** programming practices and several **software design patterns** to increase program efficiency, resilience to change, and maintainability
- Implemented several algorithms to generate random rooms with a distributed population of enemies

Blog Web App, *MongoDB | Express | Node*

- Created a full-stack web app using the MEN stack for managing blog posts
- Designed a responsive, intuitive, and scalable interface utilizing **JavaScript**, **HTML**, **CSS**, and **Bootstrap**
- Created a secure login system using **Passport.js** and **Express** and incorporated a **MongoDB** database to store user-information and blog posts

Personal Website, *Hugo | Markdown | HTML/CSS*

- Built a static website using **Hugo**, **HTML**, and **Markdown**, to display personal projects and links
- Deployed using **GitHub Pages**

EDUCATION

University of Waterloo | 2A

09/2019 – present | Waterloo, Canada

Candidate for Bachelor of Computer Science (Co-op)

- **Major Average:** 93.25
- **Dean's Honours List** (*F2019, W2020*)
- **Relevant Courses:** Object-Oriented Software Design, Data Structures and Data Management

AWARDS

President's Scholarship of Distinction, *University of Waterloo*

Entrance scholarship awarded for achieving above 95%

Euclid Math Contest, *CEMC*

Top 25% in Canada