Github: https://github.com/otomn



Markdown version with illustrations can be viewed at https://github.com/otomn/resume

Technical Skills

Languages: C, C#, C++, Java, JavaScript, Python, Shell, SQL, Swift, TypeScript

Development tools: Git, Vim, Unreal, Unity, Docker, Postgres, VSCode, Xcode, PhysX

Work Experience

Software Developer, Siege Camp, 2021-July to present (C++)

- Designed and implemented multiple systems for a large MMO open world game.
 - The sandbox building system that allows the players to build their own castle.
 - The Animal AI system behaviour tree framework and navigation framework that supports thousands of animals at once.
 - A Message-based parallel systems that allows multiple systems to run in parallel with low performance overhead.
 - Network packet serialization and bandwidth optimization.
 - Entity collision visualization tools, code generation tools, data verification tools, etc.

Software Developer, Destiny Solutions, 2019-May to 2020-June (Java, Javascript, SQL)

Developed and maintained a large online course management system that is used by over 90 universities.

Software Developer, BohrSoft, 2018-June to 2018-August (Java, C#)

- Designed and developed a form scanning app that can extract and save the data electronically
- Developed the backend of an instant messaging app for higher reliability and maintainability.

Past Projects

More details and illustrations can be viewed at: https://github.com/otomn/resume/blob/main/projects.md

Lumen, Lead programmer (C#, Unity)

- Developed the core game mechanics and player control system using Unity...

SDC Web App, Backend lead (TypeScript, Node, PostgreSQL)

- Designed the backend system structure, validation framework, and database serialization framework with a customized ORM.

Open-Source Projects

- st: A tool for storing the output of any program and select lines to be used as inputs or arguments to other programs. Greatly improves the efficiency when working with git.
- GoogleTranslateTab: a light translate tab app built using SwiftUI.

Education

University of Toronto - Computer Science Specialist (Honours Bachelor of Science)

CGPA: 3.95 Scholarships:

- The Isabel Bader In-Course Scholarship
- Hutcheson, Lecily (White) (Johnston) Scholarship Ii
- Lawrence And Sharen Ho International Scholarship Iii