Tiger Ding

Education

University of Waterloo | Bachelor of Computer Science

Waterloo, ON | Sep 2023 - Apr 2028

• Computer Science Club executive, Data Science Club member.

Experiences

Slime Scholars ☑ | DevOps Engineer

Waterloo, ON | Oct 2023 - Apr 2024

- Led migration from **Vercel** to **AWS**, resulting in a **decrease in maintenance cost by 60%** for NodeJS based web learning product.
- Utilized AWS Elastic Beanstalk, S2, Route 53, and IAM services and increased learning material availability for students.
- Wrote Bash scripts to manage pre-deploy environment setups for yarn and npm package managers.
- Resolved upstream dependency conflicts in NextJS based education product.

Projects

- Designed and built a **NextJS based** personal website **I** styled with **Tailwind CSS utility classes** for personal publications, tutorial series, and information.
- Built with **UI** and **UX principles** in mind with a **mobile responsive design**.
- Supports webpage generation from Markdown, including images, links, math equations, etc.
- Utilized **serverless backend APIs** for a contact form that automatically forwards visitor's message to personal email inbox, facilitating personal contacts.

dream_log ☑ | JDK, Java Graphics

- Built a pixel art style 2D sandbox **game in Java** using the **Swing** and **AWT** libraries.
- Utilized **objected oriented programming** concepts, such as creating game levels from abstract classes, utilizing polymorphism, inheritance, and data encapsulation.
- Implemented player and object shadow tracing from scratch to simulate blockage of player view.
- Graphical assets were **created in Blender as 3D assets**, then rendered into pixel style game assets.

CP Solutions \Box | C++, Java

• Created **competitive programming solutions** for DM::OJ online judge, applying **data structures and algorithms** such as segment tree and dynamic programming.

Skills

- Languages: C++, Java, Python, JavaScript, TypeScript, HTML/CSS, Lua
- Technologies/Frameworks: NodeJS, ReactJS, NextJS, Tailwind CSS, Linux, AWS (Elastic Beanstalk, EC2, S2, Route 53, IAM)
- Tools: Git, Bash, Xcode, AWS CLI, (Neo)Vim, Blender

Awards

Canadian Mathematical Olympiads (1 of 77 invited in Canada)	Apr 2023
Canadian Senior Mathematics Competition Honor Roll (62nd out of 13,372)	Nov 2022
Canadian Computing Competition (Senior) Distinction (Top 20%)	Feb 2023
University of Toronto Scholar Award	Feb 2023
Governor General's Academic Medal (Highest grade 11 and grade 12 average)	Jun 2023