Tuong Luu

(226) 791-2248 | tm2luu@uwaterloo.ca | linkedin.com/in/luut189 | github.com/luut189 | luut189.github.io/

EDUCATION

University of Waterloo	Waterloo, Ontario
Candidate for Bachelor of Honours Computational Mathematics	*Sep 2023 - May 2028*

TECHNICAL SKILLS

Languages: Java, Python, C, C++, JavaScript, TypeScript, HTML, CSS
Developer Tools: Git, GitHub, Docker, Docker Compose, Linux, Bash, Cloudflare Tunnel, SSH, VS Code, Postman
Libraries & Frameworks: React, Express, Node.js, MongoDB, FastAPI
Databases & Hosting: MongoDB Atlas, Cloudflare DNS, Namecheap
Certifications: Azure Fundamentals, Azure AI Fundamentals

EXPERIENCE

Software Developer Intern	Toronto, Ontario
Lynkr Inc	*Sep. 2025 – Present*

- Co-led the development of **Lynkr Workbench**, the company's flagship product, from inception to beta alongside another developer, generating over **$100,000 CAD** in revenue.
- Built a containerized **FastAPI** and **Next.js** solution using Docker, featuring an AI orchestration pipeline for managing the creation and execution of agents.
- Set up **GitHub Actions** CI/CD pipelines to automate testing, linting, and deployments, reducing integration issues and ensuring production-ready builds.
- Integrated **Google Cloud Secret Manager** to securely manage API keys and credentials, ensuring compliance with best practices in cloud security.

WE Accelerate Program - Azure and Artificial Intelligence	Waterloo, Ontario
University of Waterloo	*Jan. 2025 – Apr. 2025*

- Lead a team of **5** to research an AI-based solution to prevent financial fraud against elders
- Designed and implemented a **comprehensive planning tool** to organize and manage project milestones
- Developed the **pipeline sequence wireframe** using **Microsoft Visio**, visualizing each step of the project to ensure a clear and structured workflow
- Worked closely with a **project mentor** to align project goals with **industry standards** and **best practices**

PROJECTS

AniDis - Anime Discussion Platform | React, TypeScript, Node.js, Express, MongoDB, Docker

- Developed a full-stack anime discussion platform (**MERN**) with RESTful APIs and real-time updates for **1,000+ titles** via third-party data sources
- Built a threaded comment system with **unlimited nested replies**, using optimized rendering strategies for scalable, high-performance discussions
- Automated data ingestion and trend updates with scheduled backend jobs, ensuring **100% daily freshness** of content
- Applied **containerization** (Docker, Docker Compose) with multi-stage builds for efficient, reproducible, and cloud-ready deployment
- Secured configuration with environment variables and employed **Git workflows** compatible with CI/CD pipelines to support collaborative development
- Self-hosted production deployment through **Cloudflare Tunnel + custom domain**, demonstrating integration of networking, routing, and DevOps practices

Kyzen - 2D Game Engine | Java, LWJGL, Maven, OpenGL

- Developed a 2D game engine with **batch rendering**, optimizing the rendering of multiple objects in a single batch for improved performance by up to **60%** when handling **1000+** objects per frame
- Utilized **Object-Oriented Programming** (OOP) principles to create scalable software, implementing design patterns like **Builder** and **Singleton** to ensure modularity and maintainability
- Implemented an **Entity-Component System** (ECS), providing a modular and extendable architecture for flexible game object composition
- Integrated **texture atlas** support, enabling **efficient** texture management for sprites and tiles, reducing draw calls by over **70%**