# Miller Ding

millerding.com github.com/mding022

#### **EDUCATION**

## **University of Ottawa**

Ottawa, ON

B.Sc. of Computer Science, Minor in Economics, Co-op; CGPA: 9.3/10.0

Sep 2023 - May 2027

- Concentration: Software Engineering
- Coursework: Data Structures & Algorithms, Object-Oriented Programming, Design of Algorithms, Statistics,
   Computer Hardware, Programming Languages

### WORK EXPERIENCE

## Jinglemobi Technology Co. Inc.

Toronto, ON

Software Engineer and Design, Full-time Internship

Apr 2024 - Sep 2024

- Led the design and supported the implementation of two mobile apps leveraging open-source AI generative image and video software for entertainment and productivity, over a span of four months.
- Successfully launched in the US, Canada, India, Brazil, and the majority of southeast Asia on both the App Store and Google Play Store.
- Wrote RESTful APIs with Java Springboot for backend video generation and mapping user-generated videos in our cloud MySQL database. Implemented Base64 encoding for generated videos for compatibility.
- Designed complete UI/UX for iOS and Android apps, ads, in-app content thumbnails, and app store landing pages using Figma, Photoshop and After Effects for in-app animations.
- Used dynamic After Effects layering through Java, along with FFmpeg to create 4 automatic short form content generation APIs using Java, shell script, and python.
- Developed a scalable queuing system with multiple thread-safe queues to enhance the productivity of our video generation services, streamlining workflows and improving our cloud server's efficiency.

## **Greentop Technology Inc.**

Vaughan, ON

Computer Assembly Technician, Full-time

May 2023 - Sep 2023

- Assembled refurbished desktop and server computers for businesses and consumers. Performed quality control on various hardware components, and managed an inventory database to keep track of stock.
- o Installed and debugged operating systems, ensuring that all computers were plug and play for customers.

#### **PROJECTS**

- Ciena Challenege 2024: Third Place Winner Next.js, Tailwind, Spring Boot, Python, Docker: Fully designed, created, and paired the backend and frontend for a fully decentralized peer to peer, chunk splitting and building file sharing service, using Next.js for the frontend and Spring Boot for the backend. The project was implemented in 12 hours and had various security features, such as SSH tunnelling to prevent port exposure, CORS policies, and HTTPS authentication controllers in Spring. My final application followed the guidelines of the Spring MVC architecture.
- Sankey Diagram Generator Linux, Spring Boot, Next.js: A user friendly sankey diagrams builder for various use cases, such as personal budget flow diagrams, business expensives, and company financials. Service hosted on a Raspberry Pi running debian OS.
- TheTimepiece.ca React, Tailwind CSS, Next.Js, Spring Boot, Shopify: Designed and implemented a responsive landing page for an e-commerce business selling our custom handcrafted automatic watches. Fully designed the UI and UX. Built with Next.js and Tailwind.
- Holo AI: iOS and Android Java, Spring MVC, Shell, MySQL: A mobile app designed for productivity and entertainment. Divided into multiple different tools, each with different approaches to AI video generation, including image to video generation templates, text to video generation, story-based video generation, and short-form content automation.
- AE API Java, Python, Spring, CLI: Developed a REST API in Java Spring that programmatically processes images
  and videos, applying dynamic layering to After Effects project file templates.

#### **SKILLS**

**Languages and Frameworks**: Java, Python, Spring Boot, JavaScript, TypeScript, React, Tailwind CSS, Next.Js, MySQL, MyBatis

**Technologies**: Git, GitLab, Postman, Maven, MySQL, DBeaver, Adobe Suite (Adobe After Effects, Photoshop, Illustrator, XD), Figma, Linux, FFmpeq, Cloud Infrastructure Deployment, and Elastic Compute Service (ECS)