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Miller Ding

EDUCATION

University of Ottawa   Ottawa, ON
B.Sc. in Computer Science , Minor in Economics   *Sep 2023 - May 2027*
- **CGPA**: 9.2/10.0, Dean's Honour's List
- **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.
- 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.
- Installed and debugged operating systems, ensuring that all computers were plug and play for customers.

PROJECTS

Ciena Challenge 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. Used SSH tunnelling and CORS restrictions for security.

SolaceFlow: React, Next.js, Spring, Solace PubSub+, Java JMS: Implementation of the data streams between stock market exchanges, market data, and brokerages, using Solace's Event Brokers and Queues. Used PubSub+ to stream data between each Spring application controller.

Brightspace Grades Projection - Chrome Extension, Javascript, HTML, CSS: Created a chrome-based browser extension that scrapes web data from Brightspace and compiles it into a projection of all student grades, including future preliminary grades.

Focusify: uOttaHack StarkNet Challenge Winner - Next, React, Cairo: Designed the UI/UX frontend and connected our backend integrations to the web application.

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, FFmpeg, Cloud Infrastructure Deployment, Solace PubSub+, and Elastic Compute Service (ECS)