Miller Ding

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EDUCATION

University of Ottawa

Ottawa, Ontario

B.Sc in Computer Science, with a Minor in Economics, CO-OP. CGPA: 9.2

2023-09-01 - 2027-05-01

TECHNICAL SKILLS

Languages and Frameworks: Java, Spring, Python, Flask, TypeScript, JavaScript, React, Next.js, Tailwind, Framer Motion, SQL, MySQL, SQLite, MyBatis, Docker, HikariCP, Puppeteer

Developer Tools: Git, Gitlab, Maven, Postman, Solace EDA, Figma, DBeaver, NeoVIM, Gunicorn

Skills: Spring MVC, JWT/OAuth, DevOps, CI/CD, UI/UX design, Adobe Suite (Photoshop, Premiere, After Effects), Cloud Infrastructure (AWS EC2, Alibaba ECS), Server Networking (Nginx, Cloudflare Tunnels, caddy), Linux (Debian, Ubuntu)

EXPERIENCE

Software Engineer Internship

April 2024 - Aug 2024

Jinglemobi Technology Co. Inc.

- 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 Spring Boot 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.

Computer Assembly Technician

May 2023 - Aug 2023

Greentop Technology Co.

- 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

Servera | Java Spring, Python Flask, Next.js, Tailwind, Cloudflare, Nginx, SQLite3, Stripe API 2025-03-01 - Present

- Servera.dev is a full-stack software development SaaS that creates, builds, and deploys users' backend servers with AI, and provides users with a designated endpoint to use in their own applications using Gemini 1.5 Flash
- Built infrastructure on my own Linux server to balance server loads by managing gunicorn worker threads to save costs
- Designed a Spring gateway proxy to forward obfuscated URLs to each server through a mapper with caching
- Generates a complete visual backend model with a graphical interface by compiling full AST trees
- One-click integration for custom agentic AI models based on user-defined system prompts and parseable return formats
- Dynamic SQLite3 databases and schemas for each instance based on user request, with AI generated models
- User-friendly UI design with AI assisted features to help users autofill route prompts and queries

Focusify - uOttaHack 7 (Starknet) Winner | React, Next.js, Cairo-lang, Ethereum Smart Contracts

2025-01-15

- Focusify is an event-based competition hosting platform based on the Starknet platform using Ethereum smart contracts
- Cairo scripting language was used to build and deploy contracts onto the blockchain, and Next.js was used as the frontend

Ciena Challenge - 2024 Hack the Hill Winner | Java, Python, Docker, React, Next.js

2024-10-01

- Implemented the backend and front end for a decentralized P2P file sharing application by distributing file chunks
- Used Spring Boot and SSH tunnels to interact with other servers, and a middleman to act as a DNS server

Holo AI (iOS and Android) | Java Spring, JWT, Flutter, Dart, MyBatis, Redis

2024-05-01 - 2024-08-20

- Holo AI is a mobile app built by Jinglemobi for productivity and entertainment, using AI text-to-video and image
- Worked on building the backend infrastructure, handling large concurrent mobile users with efficient queuing
- Designed the mobile UI/UX using Figma, Photoshop, After Effects, and Illustrator