Ming Liang Dai

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GitHub: https://github.com/MingLiangDai   **Portfolio:** https://mingliangdai.github.io

Skills Summary

- **Technical Skills:** JavaScript, TypeScript, Python, C, C#, C++, React, Vue, Node, Django, .NET, AWS, Azure
- **Soft Skills:** Leadership, teamwork, communication, hard worker, fast learner

Work Experience

Software Engineer Intern   Toronto, ON
KPMG – Ignition Team   September – December 2021

- Proposed a **DevOps** solution that can dynamically configure a single frontend build to be deployable on multiple environments (production, development, UAT), **reducing FE team's deployment time by 80%**
- Took **initiative** to be one of the early members of a feature team and brought feature to full production while working **collaboratively** with senior software engineers and UI/UX designers
- Developed **reusable** and **scalable** FE components, using **Vue.js** and **TypeScript**, that dynamically preloaded previous years' tax information, reducing need for repetitive user input across multiple repositories
- Designed **NoSQL** efficient database models alongside senior software engineers and developed efficient enterprise-level backend API using **.NET** and **C#**

Software Engineer Intern   Mississauga, ON
JamLabs Data Science   January – April 2021

- Developed authentication system on **Node.js** by applying best security practices including **password hashing** and **signed tokens**, allowing users to safely establish their sessions on the company network
- Leveraged **AWS DynamoDB's** advanced partitioning feature to build out well-structured and partitioned database models, dramatically reducing read/write run time
- Incorporated administrative functions using **AWS Lambda** to efficiently manage databases and user accounts on a completely serverless environment
- Integrated data processing pipeline using **AWS Lambda** to automatically trigger and provide seamless UX when users upload data to company data lake

Frontend Developer   Toronto, ON
MEGAComfort Inc   June – August 2020

- Redeveloped the company's dashboard portal from scratch, **significantly reducing load up time**
- Implemented 15+ dashboard widgets using third-party libraries **to visualize dashboard data** for distributors and companies affiliated with MEGAComfort Inc.
- Implemented resizable dashboard elements and **real-time data filtering**, allowing for **user customizability** and responsive, interactive **data visualization**
- Led the development of a **React** camera web application using **OpenCV.js** library to reduce the need for user inputs and improve **user experience** through advanced **image processing** and automatic photo taking

Projects

- **Personal Portfolio Website**   Personal website showcasing several of my projects
- **The Lemonade Stand**   Transaction tracker app for a virtual lemonade store
- **Guess the League Champion**   Fun browser multiple-choice game with League of Legends champions
- **Pixel Art Animator**   Image processing and animation web app using HTML canvas element
- **Instagram Bot**   Python script for identifying followings that do not follow back

Education

University of Waterloo   Waterloo, ON
Candidate for Bachelor of Applied Science: Honours Computer Engineering   September 2019 – April 2024

- President's Scholarship of Distinction (95+% admission average)

Interests

- Personal finance, stock market, cryptocurrency, video games, computer hardware, keyboards