Xiangyu Qin

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EDUCATION

University of Michigan, Ann Arbor, MI

M.S Computer Science & Eng GPA 3.93/4.00   *August 2022 – Dec 2023*

B.S Computer Science, Minor in Mathematics GPA 3.91/4.00   *August 2019 – Apr 2022*
 - 2 term James B Angell Scholar, 5 term University Honors, William J. Branstrom Freshman Prize

EXPERIENCE

Optiver – Chicago, IL

Software Engineer Internship   *June 2023 – Aug 2023*

- Enhanced a core trading tool by automating a daily manual parameter update saving **10 trading hours a week**.
- Integrated a new C# server that automates trade booking by listening to broker API and visualizes trader errors.

NortonLifeLock – Tempe, AZ

Software Engineer Internship   *May 2022 – Aug 2022*

- Provided new features to the GUI front end using **AngularJS** to help the Customer Retention Management team intelligently configure messaging campaigns to select end users for NortonLifeLock products.
- Implemented backend server functionality for the communication platform via **Java REST APIs** interacting with **Oracle** and **Azure Cosmos** databases.
- Participated in **Agile** iterative approach using **Jira** while utilizing **Maven**, **Jenkins** for unit and integration testing, along with **Bitbucket** and **Git** for source management to deliver features quickly and with high quality.

Cookpad Inc. – Kanagawa, Japan

Software Engineer Internship   *Aug 2021 – Aug 2021*

- Integrated **SWR React** on the main service website to cache API responses reducing load time from **3s to 2ms**.
- Assisted in delivering MVP by developing websites using **Next.js** and **Ruby on Rails** for **GraphQL** API.

PID inc. – Tokyo, Japan

Full Stack Internship   *Sept 2020 –Aug 2021*

- Designed and developed a 30-page management web system using **React** and **Laravel**.
- Remodeled project progress and company record management by automating monthly data entries, calculations, and data visualizations.

University of Michigan, Ann Arbor, MI

Research Assistant   *Dec 2021 – Dec 2022*

- Experimented with topic modeling techniques like **LDA** and **GloVe** to investigate the impact of paywall introduction news content in local newspapers

EECS 203 (Discrete Math) Teaching Assistant   *Aug 2020 – Present*

- Spearheaded the exam operations as the Exam Management Lead by establishing detailed timelines, coordinating with staff members with tasks, and introducing techniques to streamline the delivery of the exams.
- Delivered a range of teaching activities in a core CS course with 1000+ students including holding discussions and office hours, writing homework/exam questions, and answering 2000+ questions on (Q&A Forum).
- Improve accessibility of course content for students and faculties by developing a course website

PROJECTS

Game website – JavaScript, PHP

Sudoku, Tetris, Flappy Bird, Space Invader.

- Optimized sudoku puzzle generation to under 1 millisecond by utilizing bit-wise operations and combining backtracking with 2 sudoku specific algorithms.
- Manage leaderboards of user high scores for each game using PHP.

Handwritten Table Recognition – Python

- Developed an OCR for handwritten table records to replace manual inputting of swimmer's training records.
- Applies image processing techniques using SciPy and OpenCV to extract data cells and now reading papers to tackle digit segmentation.

TECHNICAL SKILLS

Proficient – C/C++, C#, WPF, Python, JavaScript/TypeScript, React, Next.js, HTML/CSS, Git, Flask
Familiar – SQL, Ruby, Ruby on Rails, Swift, AWS