

# Xiangyu Qin

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## EDUCATION

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### 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

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### Optiver – Chicago, IL

Software Engineer Internship

June 2023 – Aug 2023

- Enhanced a core trading tool by integrating an **automation** for a daily parameter update in **WPF** saving **over \$100K** each year in trading operational cost
- Integrated a new **C#** server that automates trade booking by connecting to broker API through the FIX protocol 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 payroll 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 including holding discussions, office hours, and writing exam questions
- Improve accessibility of course content for students and faculties by developing a course website

## PROJECTS

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### 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

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C/C++, C#, Python, JavaScript/TypeScript, React, Next.js, HTML/CSS, Git, Flask, Ruby on Rails, EC2, S3