# **David Ma**

6609 Cornelia Drive, Edina, MN || (952)-594-5650 || maxxx818@umn.edu

#### **Education**

**University of Minnesota – Twin Cities** 

Minneapolis, MN

College of Science and Engineering

Computer Science BS, Mathematics BS

May 2021

**Computer Science MS** 

Expected May 2022

GPA: 3.86/4.00

**Relevant Coursework** (*Italicized in Progress*): Algorithms and Data Structures, Intro to Operating Systems, Advanced Programming Principles, Intro to Artificial Intelligence 1 and 2, Computer Vision, Data Mining, Database Systems, Software Engineering 1, Machine Learning, Stochastic Processes, Computer Security, *Recommender Systems, Advanced Machine Learning* 

# **Work History**

Amazon Seattle, WA

Software Development Engineer Intern

June 2021- Aug 2021

- Independently built a full stack project to store and retrieve Alexa data
- Coded a Java software package to facilitate writing data to a secure internal database at runtime
- Built a front-end stack to query data and display it in a UI using React and various AWS resources (CDK, S3, API Gateway, Lambda, Cognito, CloudFront)

Securian Financial Minneapolis, MN

Application Development Intern

June 2020- Aug 2020

- Collaborated on an agile team with five employees to develop components for the Securian website under Adobe Experience Manager (AEM)
- Developed code in both the frontend and backend of AEM, utilizing software development tools such as Git and Jenkins
- Took initiative and worked independently on projects such as a search suggester, scripts to iterate through the website, and a component to automatically display upcoming events

#### UnitedHealth Group, Optum

Eden Prairie, MN

Software Development Intern

May 2019 - Aug 2019

- Utilized graph database technology and machine learning to model social determinants of health and predict health outcomes
- Used Synthea, an open source library, to generate a sample patient population to use for data manipulation
- Led work with data analysis on specific social determinants and sections of the graph schema on a team of nine employees and interns

# **Leadership and Experience**

# Science and Engineering Student Board (SESB)

Minneapolis, MN

President

May 2020 - May 2021

- Led the SESB Leadership Team to improve the undergraduate College of Science and Engineering (CSE) experience
- Oversaw projects related to diversity and inclusion, community-building events, advocacy, and other initiatives
- Collaborated with stakeholders such as CSE student groups, administration, and individual students

#### **Chinese American Student Association**

Minneapolis, MN

Secretary

May 2020 - May 2021

- Served on a board of 11 members to promote the Chinese American experience and build community on campus
- Managed communications and inventory as part of secretarial duties
- Planned monthly events for up to hundreds of people for community building and advocacy purposes

#### **Skills**

- Skilled in HTML, Javascript, CSS, Java, Python, C++, SQL
- Exposure to machine learning concepts, tools, and libraries e.g. PyTorch, sklearn, OpenCV, Pandas, etc
- Experience with software development tools and concepts e.g. Git, Jira, Jenkins, Agile
- Knowledge of software engineering best practices such as design patterns, dependency injection, code testing, etc
- Experience with AWS
- Fluent in Mandarin