MARCUS ALEXANDER SCHUBERT

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Education

- **University of Michigan**, Ann Arbor, MI GPA: 4.0/4.0
  B.S.E. Computer Engineering *Graduation: May 2025*
  Minors in Math and Business, James B. Angell Scholar

  Past Coursework: Data Structures and Algorithms, Computer Organization, Linear Algebra, Multivariable & Vector Calculus
  Current Coursework: Machine Learning, Honors Differential Equations, Probability, Circuits
  Extracurriculars: Michigan MagnUM Varsity Ultimate Frisbee, Michigan Pops Orchestra

Work Experience

- **Google**, Sunnyvale, CA May 2023 – August 2023
  Software Engineering Intern *Go, SQL*
  - Contributed to the customer management system for Google Cloud Platform's Chronicle enterprise security service
  - Developed and released a service in Golang on Chronicle's customer management server which gathers data regarding details of the customer provisioning process and updates a database
  - Designed a dashboard to display this data and presented results to 20+ engineers including Chronicle executives

- **Google**, New York, NY May 2022 – August 2022
  Software Engineering Intern *Python, SQL*
  - Designed and updated archival database using Python and SQL to track ownership of over 16K tests as part of effort to strengthen test owner relevancy in Google Ads at Google's NYC office
  - Developed an analyzer in Python to enforce correct test ownership in tests across the Ads codebase
  - Built a command line tool in Python for engineers to use to automate the ownership migration process

PROJECTS AND LEADERSHIP

- **Biologically Inspired Robotics and Dynamical Systems Laboratory**, Ann Arbor, MI January 2023 – Present
  Quadcopter Team Lead, Research Assistant *NumPy, Matplotlib, Python, C++*
  - Leading fellowship-funded project on Multi Legged Robots and Animal Motion Research (MuRoAM) Team
  - Simulated quadcopter motion with asymmetric frame and motor angles using the Python Matplotlib library
  - Contributed to a team refactoring C++ library to control Dynamixel servo motors using packet communication

- **Myelin Tech Space LLC**, Ann Arbor, MI February 2023 – Present
  Co-Founder, Finance Director *Organizational Skills*
  - Managed budgeting and acquiring equipment for summer-long neurotech hacker house
  - Led publicity campaign to grow neurotech organization membership from 10 to 40+ members
  - Collaborating with University of Michigan neuroscience and biology labs to solve electrical and computer engineering-related problems that labs do not have the resources to address themselves

- **Predicting Drug-Kinase Binding Affinities using Convolutional Neural Networks** September 2018 – May 2020
  Independent Researcher *Keras, Tensorflow, NumPy, Matplotlib, Python, SQL*
  - Trained and tested convolutional neural networks with the Keras API to predict binding affinity between drug compounds and proteins, varying model structure and achieving an overall prediction accuracy of 73%
  - Gathered data from multiple sources and created an SQLite database to manage and clean data

- **Simulating the Collapse of an Interstellar Dust Cloud due to Gravity** September 2020 – May 2021
  Independent Researcher *NumPy, Matplotlib, Newtonian Physics, Python*
  - Leveraged linear algebra and Python's Matplotlib to model particles moving through space under the influence of gravity
  - Circumvented the three body problem and produced results supporting solar system formation theory

SKILLS

Programming Languages: Python, C/C++, SQL, Go, MATLAB, Swift
Frameworks, Libraries, Tools: Tensorflow, Keras, Pandas, NumPy, Matplotlib, Git/Version Control
Spoken Languages: (Fluent): English, (Conversational): Mandarin, German
Other: Violin study (15 years)

Honors & awards

Scored a 1600 on SAT: 99th percentile 2019
AIME (American Invitational Mathematics Examination) qualifier: top 2.5% of AMC 10 test takers 2018