

Ian Sabolik

225-241-2017 | iansabolik@gmail.com | [linkedin.com/in/ian-sabolik](https://www.linkedin.com/in/ian-sabolik) | github.com/iamian1 | iamian1.github.io

EDUCATION

Texas A&M University - College Station, TX

Bachelor of Science in Computer Science - Minors: Cybersecurity, Mathematics

Aug. 2020 – May 2024

3.57 GPA

EXPERIENCE

Software Engineer

MOVE Texas A&M

January 2023 – May 2023

College Station, TX

- Developed a full-stack web application using Ruby on Rails, PostgreSQL, and Docker for the MOVE Texas A&M student organization in a semester-long Software Engineering class
- Collaborated with a team of four other students to create an efficient system for organizing events, tracking attendance, and managing activities for over 100 members
- Reduced administrative workload by 50% by automating manual processes and integrating third-party APIs.
- Utilized GitHub for version control, continuous integration, and deployment to Heroku, resulting in a 20% reduction in development time
- Integrated the application with Google Calendar, enabling automatic synchronization of events

Machine Learning Research Assistant

Texas A&M University

June 2023 – August 2023

College Station, TX

- Assisted in the development of BoxHED2.0, a software package for non-parametrically estimating hazard functions via gradient-boosted trees
- Translated Python preprocessing code into R, enabling cross-platform compatibility and facilitating collaboration with R-centric researchers
- Wrote wrapper code to allow computations to be done by C++ code, while still interfacing with R, allowing for more efficient computations
- Created a detailed presentation outlining the preprocessing steps and their Python implementation for the machine learning model.

PROJECTS

Predictive Modeling with Machine Learning | *Neural Networks, PyTorch, Python* January 2023 – May 2023

- Collaborated with two others to develop a highly effective machine learning model for predicting in-hospital mortality based on clinical health data (AUC-ROC score: 0.91522)
- Preprocessed and standardized subset of eICU dataset with 50 columns of numerical data
- Implemented optimized neural network with tuned hyperparameters and Adam optimizer.
- Addressed imbalanced data challenge through effective oversampling technique.
- Demonstrated meticulous approach to hyperparameter tuning for optimal model performance.

Ray Tracer | *Computer Graphics, Advanced Trigonometry, C++*

January 2023 – May 2023

- Developed a C++ program that utilizes ray tracing to generate images
- Implemented lighting and shadows, supporting multiple light sources
- Created reflective spheres that accurately capture scene reflections

Point of Sale System | *React.js, JavaScript, PostgreSQL, Python, Git*

August 2022 – December 2022

- Collaborated in a team of six in a school project to design and developed a database management system for a point-of-sale system using SQL
- Built a front-end website using React.js, connected to the back-end, built using Express.js
- Programmed Python scripts to populate the database with existing data

SKILLS

Developer Tools: AWS, Docker, Git, Google Cloud Platform, PyCharm, SolidWorks, Visual Studio, VS Code

Frameworks: Express.js, Node.js, React, Ruby on Rails

Languages: C++, HTML/CSS, Java, JavaScript, Python, R, Ruby, SQL (MySQL, PostgreSQL), TypeScript

Libraries: Matplotlib, NumPy, OpenGL, OpenMP, pandas, PyTorch, scikit-learn

Awards: 2020 National Merit Finalist

Soft Skills: Adaptability, Communication, Leadership, Problem-Solving, Teamwork, Time Management