David Gorin

Email: davidgorin03@gmail.com **Linkedin.com/in/david-gorin-181476221/**
Portfolio: david-gorin.com **GitHub:** https://github.com/dgorin6

EDUCATION

Georgia Institute of Technology **May 2025**
B.S Computer Science concentrations in AI and Information Internetworks,
GPA: 3.91
Undergraduate Coursework: OOP, Objects & Design, Intro to ML, Database Systems, AI, Data Structures, Algorithms, Systems and Networks, Computer Architecture

TECHNICAL SKILLS

Programming Languages: Python, JavaScript, TypeScript, Java, C#, C/C++
Frameworks: React.js, Node.js, .NET , Express , Junit, Xunit, NumPy, Scikit-learn , Tenserflow Keras, Pandas, ROS
Databases: MongoDB, Azure Cosmos DB, MySQL
Tools: Git, Postman, IntelliJ, Visual Studio, VS Code, and JupyterLab

WORK EXPERIENCE

Software Engineer Intern, CNH Industrial, Burr Ridge, IL **May 2023 – Aug 2023**
- Developed a React based application for a support team of 50 people to view infrastructure KPI's and create work tickets in Azure DevOps, reducing an hours long process to minutes.
- Created an accompanying microservice in .NET that allowed the application to access all required Azure DevOps services, providing data about 20 projects and streamlining ticket creation through a single entry point.
- Implemented caching through Azure Redis to reduce microservice latency by 90% on repeated requests for project data.
- Added application logging using Serilog and Azure Application Insights to timestamp microservice traces and errors and Azure Cosmos DB to store all information about any ticket created through the application.

Data Science Intern, AbbVie, Mettawa, IL **Jun 2022 – Aug 2022**
- Worked on an XGBoost model predicting doctor prescription rates. Optimized data transformation using a gradient descent-based approach to fine-tune hyperparameters of six distinct marketing tactics, improving model accuracy.
- Improved adstock data pre-processing efficiency using numpy broadcasting, decreasing processing time by 90%.

Software Researcher, Vertically Integrated Projects, Atlanta, GA **July 2020 – September 2021**
- Aided in the calibration of an RL model of a roundabout using python and TensorFlow
  Tuned hyperparameters for a reinforcement learning (RL) model to stabilize and improve entropy, enhancing model performance and consistency.

PROJECTS

SpotifAI, spotifai.net **2023**
- Created an application with React and Node.js that uses OpenAI to generate a Spotify playlist based on a user prompt, allows the user to preview the playlist, and automatically adds the playlist to their account.
- Utilized OOP principles to connect OpenAI API responses with their corresponding Spotify use cases.
- Deployed the application in AWS EC2, complete with load balancing and a reverse proxy using Nginx.

Atomz Board Game, atomz.herokuapp.com **2022**
- Developed an online multiplayer strategy board game using React.js and Node.js.
- Integrated remote play support using web sockets via the Socket.io library and Express.

Self-Navigating Robot, Robonav, Georgia Institute of Technology **2021 - Present**
- Worked on a team that created autonomous vehicles which participated in the IGVC and URC competitions.
- Wrote software design documents, reviewed with the team, and proposed a schedule.
- Modified the simulation in C++ to exhibit noise in the ground truth pose in order to verify the robot's noise reduction ability.
- Created a rover model to be used in Gazebo simulations using Xacro and wrote a launch script in Python.

AI Geotagger **2022**
- Constructed and trained a 7-layer CNN using pytorch to predict a photo's country of origin with 40% accuracy.
- Implemented a custom python script that used the google street view API to gather 20,000 street view images.
- Performed image pre-processing by resizing images and utilizing PCA dimensionality reduction to reduce space.

Campus Discovery App **2022**
- Collaborated with a team to create a web app with React.js and Node.js that allowed students around campus to view, share, and rsvp for hosted events.
- Utilized MongoDB services to store and update available events in real time .
- Organized code through the creation of diagrams such as Domain Models and SSD's.