

Tyler Hirn

956-578-2025 • Atlanta, GA • tylerRhirn@gmail.com • tylerhirn.dev • linkedin.com/in/tylerhirn

EXPERIENCE

Core Music

September 2022 - Present

Independent Project/Entrepreneurship

- Leveraging advanced Machine Learning techniques, developed an innovative application that enhances personal journaling experiences with the integration of music recommendation using Flutter for Android and IOS development.
- Key features include implementing Natural Language Processing (NLP) to extract sentiment from user journal entries, and developing a personalized recommendation system through seamless Spotify API integration and a Gradient Boosting model to analyze the audio features of songs, predicting their mood.
- The culmination of these features led to a dynamic and responsive application, bridging the gap between emotion-centric journaling and mood-based music recommendation.

Research Assistant

Jan. 2023 - May 2023

Department of Psychology | Auburn, AL

- Administered and cataloged large sums of data for a study through a chatbot to test the accuracy of a Natural Language Processor model that determines if patients are being deceptive.

Senior Engineering Project: NASA Cube-Sat, ABEX Mission

Aug. 2022 – Nov. 2023

Auburn University | Auburn, AL

- Engineered a real-time satellite framework designed to measure gamma radiation from orbit, employing technologies such as Docker, C++, and F/F'.
- Designed a robust and efficient system, serving as the foundational layer for all satellite operations, including a mathematical calculation sender and receiver, event logging to ground control, and a flight control interface.

Full-Stack Engineer

Jan. 2021 - Aug. 2022

CWS | Auburn, AL

- Developed and maintained several applications utilizing a variety of technologies, including HTML, JavaScript, CSS, and SQL in an Agile environment.
- Developed an election web application for the election process of Auburn University's Board of Directors with a team of 4 developers under 1 month, resulting in an efficient election process.
- Collaborated closely on Auburn's pharmacy scheduler, and Auburn facility staff healthcare scheduling software.

Key Accomplishments:

- Implemented a student elections logistics display in a Web MVC application, personally approved by **Gov. Ivey** of Alabama, that conveyed concurrent election progress and status for over **30,000 student voters**.
- Streamlined ticket logistics for the entirety of Auburn facility staff by developing a custom web application that processed over **\$100,000 dollars'** worth in football ticketing every season.

Eagle Scout

Jan. 2014 – April 2018

Boy Scouts of America

- Planned, managed, and executed a service project, in partnership with the local Children's Hospital, to improve the outdoor environment and expand the recreational areas for the facility

EDUCATION

Auburn University | Double degree in Bachelor of Science in Software Engineering and Psychology

May 2023

- *Graduated **Magna Cum Laude***
- *Proud member of the AI club, Dean's list, Relevant Coursework: Machine learning (graduate level), Artificial Intelligence (graduate level)*

SKILLS

Python | Sklearn | Cloud Hosting | Flutter | Project Design & Management | SQL | Pandas | Adaptability | Communication