

BRYCE PARRY

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EDUCATION

Florida State University, Tallahassee, FL
Bachelor's of Science, Mathematics

August 2017 - August 2020

University of Washington, Seattle, WA
Master's of Science, Applied and
Computational Mathematics

September 2025 - Present

HONORS AND GRANTS

Florida Bright Futures Scholar (2017 - 2020)

Florida State University Freshman Scholarship (2017 - 2020)

RESEARCH INTERESTS

Numerical Analysis, Scientific Computing, Differential Equations

EXPERIENCE

Lead Software Engineer, Resound.fm

February 2022 - June 2024

Led a team of four engineers in a Series A startup to build an audio/video editing platform utilizing proprietary machine learning models built on closed and open source datasets.

- Architected the flagship product and SQL database to perform accurate predictions and edits on multitrack audio and video projects; serving 3.3TB of audio/video data from Google Cloud Storage
- Automated event-driven data-collection pipeline within a Python application to clean user-action data into over 700GB of data for AI training and validation. Processed using Google Cloud Functions and stored in Google Cloud Storage. Led to the first version of the model trained solely on user-generated data.

Full Stack Software Engineer, Resonate Recordings

September 2020 - February 2022

Provide full stack development of a PHP Laravel web application providing amateur and enterprise production teams with a platform to have audio-content edited, mastered, and hosted.

- Engineered a Python microservice to dynamically construct an AAF file from raw audio data and a JSON structure of edit timestamps
- Built large data pipeline leveraging dbt to clean and process raw BigQuery tables into aggregated podcast analytics data, and optimized BigQuery lookups to report analytics to users

PROJECTS

AAF Inverse Method, Resound.fm

Developed a novel algorithm for determining edit marks made in close-sourced Audio/Video editing software given a zipped Advanced Authoring Format (AAF) file. This allowed us to incorporate an untapped data set for training of machine learning models to identify undesirable content in audio files. Used in a data pipeline to clean and format data.

In-Parallel Audio Processing Algorithm, Resound.fm

Designed a parallel algorithm for standardizing user-uploaded file codecs, evaluating with machine learning models, and creating database assets for the audio/video file. This was the crux for fast preprocessing of uploaded audio/video files.

LEADERSHIP/SERVICE

Florida State University Society of Undergraduate Math Students

Vice President, January 2020 - August 2020

Coordinated with the other officers to promote mathematics and awareness of opportunities among undergraduates via monthly meetings and occasional talks by faculty members or graduate students. Ensured the club had registered student organization status with the university.

Florida State University Math Fun Day

Volunteer, February 2020

A community event showcasing mathematics aimed at grade schoolers. I ran a table with an interactive chaos theory example featuring a double pendulum.

Orlando Science Center Summer Education Camps

Volunteer, June 2015, June 2016

Assisted camp counselors and instructors to provide engaging and fun science education to week-long classes of 10-15 students in K-6 grades. I ran demonstrations and helped the students work through the activities, drawing focus to using scientific investigation principles and thinking about underlying forces and principles.