

# Davis Featherstone

(937) 684-3656 davis.featherstone@duke.edu Durham, NC 27707

## EXPERIENCE

---

### SOFTWARE ENGINEERING INTERN

Traverse City, MI

Aunalytics

June 2024 – August 2024

Worked on an Agile Development team contributing production code with other full-time engineers as we built a custom database and data insights platform from the ground up. My work was primarily in a Typescript + React framework utilizing Mongo DB and included:

- Implementing context handling to dynamically adjust the UI in alignment with a user's organizational branding.
- Building React components and full pages including a grid to show all information on users within an organization.
- Writing APIs to create and augment user's and organization's metadata in the database backend.
- Handling bug fixes across the entire codebase.
- Working closely with product managers to understand the larger business strategy and customer needs.
- Learning the complete product development cycle and contributing improvement suggestions to increase velocity.

### BUSINESS TECHNOLOGY INTERN

Clayton, OH

Pink Ribbon Good (National Gynecological Cancer Nonprofit)

May 2022 - Aug 2022 and May 2023 - August 2023

Led a variety of projects across the intersection of technology and non-profit business, helping Pink Ribbon Good expand through:

- Creating an MDM server for all company devices and leading the transition to an enterprise-class software suite.
- Researching and contributing to a redesigned Nurse Navigator survey, leading to increased response rates.
- Working on-site at events and communicating with donors and clients while overseeing technological processes.

## LEADERSHIP

---

### CONSULTANT FOR KAHANA

Durham, NC

Duke Consulting Club

August 2022 – May 2024

Consulted with the tech startup Kahana during a period of fast expansion of their creator content platform. Developed recommendations that were directly incorporated into their redesigned website and monetization model, and provided research into market competition and recommendations for leveraging that information for user acquisition.

### BROTHERHOOD CHAIR

Durham, NC

Sigma Chi – Beta Lambda Chapter

August 2023 – April 2024

Planned events to foster connection among brothers including tailgates, Duke Basketball watch parties, weekend trips, and Formal.

## EDUCATION

---

### BACHELOR OF SCIENCE IN COMPUTER SCIENCE & ECONOMICS CANDIDATE

Expected graduation 2026

Duke University – 3.98 GPA, Durham NC

### HIGH SCHOOL DIPLOMA

May 2022

Tippecanoe High School - 4.5 GPA, 36 ACT, Tipp City OH

Awards & Extracurricular Activities

- National Merit Finalist
- Team Co-Captain and 1st Team All-Ohio Football

## PROJECTS

---

### AI BACKGROUND MUSIC GENERATION

Project to generate and add context aware background music to video clips. Utilizes my own LORA fine-tuned LLaVA model for video to music descriptions and MusicGen to create the audio track. Built in Python with libraries including Pytorch and Peft.

### STATISTICAL PROCESSOR ANALYSIS GUI

Worked with Duke professor and graduate students to improve upon research project applying Statistical Model Checking to Computer Architecture. Built Python GUI and streamlined defining of statistical and temporal properties within the system to improve usability and project reach.

## SKILLS

---

- **Programming Languages** – Python, Java, C, React + TypeScript, JavaScript
- **Other** – Android Development, Data Analytics, MongoDB, SQL, Zsh Command Line, Git