

Griffin Burke

(630) 441-5280 | gjburke2@illinois.edu | [linkedin.com/in/griffinjburke/](https://www.linkedin.com/in/griffinjburke/) | github.com/gjburke

EDUCATION

University of Illinois Urbana-Champaign

Bachelor of Science in Computer Science, Minor in Mathematics

Expected: May 2027

GPA: 4.00

Relevant Coursework: Data Structures • System Programming • Prob and Stats for Computer Science
During Fall 2025: Intro to Algorithms and Models of Computation • Numerical Analysis • Database Systems

EXPERIENCE

Kashmir World Foundation

AI Team Lead

Remote (Based in Great Falls, VA)

May 2025 – Present

- Leading a team on the data analysis and modeling of >500 hours of rainforest audio and environmental data

Machine Learning Engineer

September 2024 – May 2025

Bioacoustics Project

- Engineering a pipeline for rainforest audio analysis, combining detected species from BirdNET with environmental data from a variety of sources (our own simulation information, location and time, and weather data)

Rainforest Initiative

- Conducted initial training and analysis on the efficiency of different sized YOLOV8 models for detecting rainforest species through trail cams, resulting in a compact model with a precision and recall of 88.5% and 88.2%
- Fine-tuned the optimal base model with systematic hyperparameter sweeps and training data augmentation, resulting in a 3.5% increase in precision and recall with 75% less time for training

Illinois Digital Animal Systems Lab

Urbana, IL

Undergraduate Research Assistant

January 2025 – Present

- Created scripts to extract frames from large (>200GB) .bag files of overhead cow video, with conversion into color and depth images that will be used for model development
- Training and tuning a computer vision model to isolate relevant portions of the cow, allowing for higher performance of subsequent weight and body score model predictions

INVOLVEMENT

Linear Algebra with Computational Applications

Urbana, IL

Course Assistant

January 2025 – Present

- Assist with Python-based labs and homework through in-person lab sections and online office hours

Project: Code

Urbana, IL

Vice President

May 2025 – Present

- Oversee RSO logistics and support project managers, fill in other responsibilities when needed

Project Manager

September 2024 – May 2025

- Lead a project called CompanyMatch, a website that utilizes HuggingFace sentence transformers to recommend companies to users based on their preferred company values, culture, and environment
- Managed a team of 14, utilizing weekly stand-ups for both the front and back end teams to synchronize learning and development for UI features, API, and model development

Developer

February 2024 – May 2024

- Collaborated with a team of 12 over two different development areas to build the UIUC Involvement Bot
- Designed and built the Flask API, website, and two neural networks for sentiment analysis

PROJECT HIGHLIGHTS

Notes Transfer | *Python, Typescript, FastAPI, Svelte, TailwindCSS*

May 2025 – Present

- Prototyping an application that digitizes handwritten notes into structured markdown
- Architecting and developing the pipeline for segmentation of note organization, translation from handwriting to text, and reassembling of text into formatted markdown

UIUC Involvement Bot | *Python, Flask, Keras, HTML/CSS/JS, SQLite*

February 2024 – June 2024

- Utilized a full stack of languages and tools to develop the front end, Flask API, and neural networks of a club recommendation website for University of Illinois students
- Developed, trained, and tested two Keras neural network models to determine the user query's club category and intensity level, with accuracies of 89.4% and 95.6%

TECHNICAL SKILLS

Languages: Python, C, C++, TypeScript, Kotlin, Java, HTML/CSS

Libraries: Scikit-learn, pandas, numpy, Ultralytics, Keras

Frameworks: Flask, FastAPI, React, Svelte, Express, React Native, React Redux Toolkit