Logan Bolton

(334) 547-0363 | logandbolton@gmail.com | github.com/LoganBolton

Education

Auburn University **Expected Graduation: May 2026**
B.S. in Computer Science, Minor in Statistics *GPA: 3.82*

Computing Research Association Outstanding Undergraduate Researcher Award – Honorable Mention

Technical Skills

Languages: Python, JavaScript, C#, SQL, Java, HTML/CSS
Frameworks/Libraries: PyTorch, NodeJS, Pandas, Matplotlib, ASP.NET, Scikit-learn,
Tools: Linux, Git, Docker, AWS, Azure
Certifications: Azure Fundamentals (AZ-900) – Microsoft Certification in Cloud Computing

Experience

Machine Learning Engineer Intern Summer 2025
Corvid Technologies *Huntsville, AL*

- Trained transformer-based models to predict radar cross section (RCS) responses for 3D objects in high fidelity physics simulation software, resulting in 27% less prediction error than previous in-house methods.
- Deployed models to company servers with a user friendly graphical interface built with Gradio to allow users to run and view the results of models without any technical knowledge.
- Built a scalable data pipeline using NumPy and PyArrow to process terabytes of raw simulation data to enable the training of physics informed neural networks.

Undergraduate Researcher - Machine Learning June 2024 – Present
Dr. Nguyen's Artificial Intelligence Lab *Auburn, AL*

- First-authored a paper in ACCV (5.6% oral acceptance rate) examining how and why models like ChatGPT fail on extremely simple visual tasks. **Cited 170+ times** and featured in technical reports by researchers from **OpenAI**, **Google DeepMind** and **Anthropic**.
- Collaborated with researchers from Adobe to determine what percentage of real world Photoshop use cases could be automated by image-editing AI models, publishing the findings in a first-author paper at WACV 2026.

Full Stack Web Developer Co-Op August 2022 – August 2024
Campus Web Solutions *Auburn, AL*

- Used C#, ASP.NET, JavaScript, and SQL Server to build a user lookup and permissions tool for staff, saving ~4 hours/week of manual work.
- Rebuilt common search queries using indexed views, reducing average response time from 6.2 seconds to 180ms.

Projects

Wordle Reinforcement Learning Agent | *LLMs, Reinforcement Learning, PyTorch* | Link 2025

- Finetuned an open-source LLM and trained with reinforcement learning to improve the model from only being able to complete 0.1% of Wordle games to successfully completing 18% of games.
- Discovered and fixed a memory leak bug in ByteDance's open-source reinforcement learning training framework *verl* in order to train a model efficiently.

Spotify Playlist - AI Cover Generator | *Django, AWS, Generative AI* | Link 2024

- Developed an AWS-hosted Django webapp, leveraging Spotify's official API and multiple AI models to automatically create visual representations of users' Spotify playlists.
- Created a program to summarize playlist metadata using the Spotify API and used this information to have an LLM prompt a diffusion image model for a stylistically similar playlist cover.

Twitter Disaster Prediction Model | *BERT, PyTorch* | Link 2024

- Finetuned a BERT model to identify Tweets referencing real world disasters.
- Achieved top 10% performance on a Kaggle competition with 83% accuracy.