

Logan Bolton

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EDUCATION

Auburn University - Auburn, AL

Expected Graduation: Fall 2025

- Academic GPA: 3.71
- Computer Science Major

Technologies/Frameworks

- Python, Javascript, C#, PyTorch, Scikit-learn, ASP.NET, NodeJS, SQL, HTML/CSS

Certifications

- Azure Fundamentals (AZ-900) - Microsoft Certification in Cloud Computing

PROFESSIONAL EXPERIENCE

Dr. Nguyen's Artificial Intelligence Lab - Undergraduate Researcher

2024 - Present

- Leading lab efforts to develop methods that enhance multimodal models' understanding of fine-grained visual features without resource-intensive fine-tuning
- Currently researching alternative ways to represent natural language inputs to LLMs that result in increased reliability and explainability in LLM responses

Campus Web Solutions - Full Stack Web Developer Co-Op

2022 - 2024

- Developed and maintained 30+ of Auburn University's most used web applications
 - Added features and fixed bugs on Auburn's Football Ticketing System, Auburn's SGA Voting System, etc. to serve over 100,000 unique users
- Created new development environments for legacy projects allowing for faster development of new features
- Modernized three ASP.NET legacy Web Forms apps from scratch to use modern versions of ASP.NET

PUBLICATIONS

Vision Language Models are Intelligent, but Blind

2024

- Co-authored a paper on the limitations of state of the art multimodal language models like ChatGPT
- Demonstrated that the current architectures of VLMs do not properly generalize to simple, abstract images
- Cited by multiple researchers, featured in prominent tech news outlets (TechCrunch, Ars Technica, etc)
- Accepted to be published in ACCV 2025 (32% acceptance rate) and selected for oral presentation (5.6%)

PROJECTS

Spotify Playlist - AI Cover Generator

2024

- Developed an AWS-hosted Django webapp, leveraging Spotify's official API and multiple AI models to create visual representations of users' Spotify playlists
- Utilized song metadata from the Spotify API in combination with the large language model Claude 3.5 Sonnet to create prompts that automatically generated playlist images with the diffusion model Flux.1-schnell

Twitter Disaster Prediction Model - Kaggle Competition

2024

- Created a fine tuned BERT model to identify Tweets referencing real world disasters
- Achieved 83% accuracy on classification and ranked in the top 10% of thousands of other contestants

IMDb Review Sentiment Analysis Model

2024

- Developed a sentiment analysis model for IMDb movie reviews using multinomial Naive Bayes classification, capable of processing 2 million reviews per second with 90% accuracy

ACTIVITIES

Alpha Sigma Phi - Zeta Psi Chapter - Head of Recruitment and Growth

2022 - 2024

- Coordinated the recruitment efforts of the 50+ chapter members, resulting in the largest period of growth in the chapter history