

## EDUCATION

**Bob Jones University**  
*Bachelor of Science in Computer Science*

Greenville, SC  
*Expected graduation: May 2027*

## PROJECTS

- AI Alignment & Safety Research Suite** | *Python, PyTorch, Prompt Engineering* November 2025
- Designed a multi-agent RLAIIF system where an "Attacker" agent autonomously evolved social engineering strategies (e.g., persona shifting) to bypass safety filters, creating a self-improving jailbreak loop.
  - Utilized Unsloth (LoRA) to fine-tune Llama-3 on short conflicting objective datasets, A100 GPU, successfully demonstrating instrumental convergence and deceptive alignment where the model refused shutdown commands to preserve its goal.
  - Crafted significant system prompts that neutralized persona attacks (0 percent success rate) and analyzed the deceptive behaviors in goal-optimized models.
- End-to-End Student Performance Prediction** | *Python, Docker, Flask, GitHub Actions* November 2025
- Developed a prod-ready machine learning pipeline to predict student test scores, handling the full lifecycle from data ingestion and transformation to model evaluation.
  - Implemented a modular codebase in python that trains and compares multiple regression models (Random Forest, XGBoost, CatBoost) to select the best-performing algorithm.
- Tiny Siri - Edge-Optimized Intent Classification** | *Python, PyTorch, Transformers, Streamlit* November 2025
- Engineered a high-performance voice intent classifier using a fine-tuned **DistilBERT** model, achieving **97% test accuracy** by implementing a full data augmentation pipeline.
  - Optimized the model for on-device deployment via **PyTorch Dynamic Quantization**, reducing the memory footprint by **48% (255MB → 132MB)** while maintaining precision.
  - Deployed the inference pipeline to the web using **Hugging Face Spaces** and **Streamlit**.
- BibleGPT - Fine-Tuned LLM & Inference Engine** | *Python, PyTorch, LoRA, Google Colab* October 2025
- Fine-tuned a Large Language Model (LLM) to generate biblically-styled text, used **natural language processing (NLP)** and transfer learning techniques. Also implemented **Parameter-Efficient Fine-Tuning (PEFT) with LoRA**.
  - Used a context aware system that dynamically injects biblical context (Book/Chapter) into the system prompt, enabling the AI to answer specific scriptural questions with high accuracy.
  - Vibe coded the entire frontend UI and successfully connected to a backend **FastAPI** server that loads my own fine-tuned LLM.
- Cuatros - Tetris-Inspired Game** | *Java, JavaFX, OOP* April 2025
- Designed a fully responsive UI with multiple screens and controls, enhancing user engagement and gameplay experience.
  - Collaborated with team on core game mechanics and frontend development, applying **Object-Oriented Design (OOD)** principles.

## EXPERIENCE

**Bob Jones University**  
*Audio Visual Technician and Training Assistant*

Greenville, SC  
*05/2025 – 08/2025*

- Delivered AV support for campus-wide events, troubleshooting hardware and software issues.
- Instructed 12+ middle school students in Arduino programming, working with professor and other instructors, in a collaborative learning environment.

## SKILLS

**Programming:** Python, PyTorch, Scikit-learn, Pandas, NumPy, Matplotlib, Docker, Git, GitHub, CI/CD