BEN BROWN

(484) 788-3226 ◇ Rochester, NY
brown.ben.2019@gmail.com ◇ linkedin.com/in/bendoesai

OBJECTIVE

Passionately motivated engineer seeking full-time, fast-paced, cross-disciplinary work combining programming, engineering, and ethics in a research setting.
Available Immediately

EDUCATION

BS Electrical Engineering, Rochester Institute of Technology — Earned 2024
Applied Statistics Immersion, Rochester Institute of Technology — Earned 2024
GPA: 3.08

SKILLS

Hardware Rapid Prototyping, Power Electronics, Electrical Lab Tools, Circuit Analysis (AC/DC)
Software Python, C/C++, MATLAB, Rust, JMP Pro, Assembly (MSP430), Git tools, LaTeX

EXPERIENCE

Research Assistant | *Cybersecurity* — Aug 2023 - Dec 2023, May 2024-Present
DeFake Project — *Rochester, NY*

- Used PyTorch to write a modular, scalable framework for variable-scale analysis, with a publication target of a November 2024 conference.
- Operated Ubuntu command line and VSCode to collect data on adversarial attacks and identified several vulnerabilities in common deepfake detection architectures.
- Participated in team reading groups about Artificial Intelligence and Cybersecurity.

Team Lead | *RIT Multidisciplinary Senior Design* — August 2023 - May 2024
SWIR Spectral Sensor Integration — *Rochester, NY*

- Prototyped support circuitry for Fabry-perot spectral sensor using LTspice simulations and schematic capture.
- Served as primary contact between customer and team by scheduling design reviews and sending weekly updates.
- Designed conference posters and drafted a detailed technical report using Microsoft Office.
- Showcased final results at Imagine RIT 2024 and CEIS Symposium

Electrical Intern | *Defense* — Jan 2023 - Aug 2023
L3Harris Technologies — *Rochester, NY*

- Wrote Python to automate hardware checks of VHF radios, increasing testing efficiency by 57%.
- Used Microsoft Office to draft procedures, maintain documentation, and write reports for small scale testing.
- Used oscilloscopes, multimeters, and soldering to debug and repair failing units.

Electrical Intern (ML/AI) | *Titanium Production* — Jan 2022 - Aug 2022
TIMET Morgantown — *Morgantown, PA*

- Used SQL database to analyze historical data and implement innovation to save the company seven figures annually.
- Deployed time series prediction technologies and python tools (NumPy, Pandas, Scikit-learn) to estimate chemical profile of furnace contents and ensure melt quality.
- Advocated for ethical implementation of technological tools to prevent reckless worker displacement.
- Designed custom genetic algorithm to optimize XGBoost hyperparameters in production use.