MADI ABIO

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Brisbane, QLD | 0434016233 | Willing to Relocate

High achieving penultimate year Electrical Engineering and Computer Science student with skills in machine learning and data science. Experienced with software development in Python, C, C#, C++. Comfortable working in Unix and command-line environments and version control with Git. Excels at teamwork and communication.

EDUCATION

Bachelor of Electrical Engineering (Honours) / Bachelor of Computer Science
2022 – 2026 | Griffith University | Gold Coast, QLD

International Trimester Exchange
2024 | University of Utah | Utah, USA

AWARDS & SCHOLARSHIPS

- **Chancellor's Scholarship |** *Griffith University, 2025*
- **Academic Excellence |** *Griffith University, 2024*
- **Academic Excellence |** *Griffith University, 2023*
- **Future of Energy Scholarship |** *Energy Queensland, 2023-Present*
- **API Students in Power Bursary |** *Australian Institute of Power, 2022-2023*
- **Brighter Futures Scholarship |** *The Abedian Foundation, 2022*

WORK EXPERIENCE

Grid Technology Intern *2025 – Present | Energy Queensland | Brisbane, QLD*

Streamlined a 15-minute daily process into a 10-30 second one by delivering a solar panel data dashboard developed with Python and Power BI using both agile and waterfall project management principles. Communicated with stakeholders and supervisor weekly via sprints. Automated various processes for non-technical team members. Organized and facilitated two engineering networking events for interns and graduates with turnout of ~50-70 attendees. Currently using GitHub to collaborate with a coworker on the process of investigating, implementing and iteratively improving an in-house machine learning approach to neutral fault detection.

Undergraduate Research Assistant *2024 | Griffith University | Gold Coast, QLD*

Processed and cleaned data for a machine learning project using Python and the hd5file format. Wrote bash scripts to assist various tasks such as down sampling wav files. Worked in a Unix environment and CLI extensively. Communicated progress to supervisor on a weekly basis.

Cyber Security Platforms Intern *2023-2024 | Energy Queensland | Brisbane, QLD*

Applied understanding of network and security protocols by assisting cyber-related ServiceNow tickets. Sought out opportunities to increase knowledge by completing various trainings such as Google's IT security and computer networking courses. Had exposure to cloud security, firewall management via Panorama, Netskope and general enterprise cyber security practices.

PROJECTS

Neutral Fault Detection | *Python, 2025 (Ongoing)*

Based upon the findings of an internal research paper, implemented an approach to neutral fault detection using anomaly detection methods. Contributed to verifying the results of the paper by developing a new method for labelling data, increasing the validation set from 5 to 50 meters. Currently using agile principles while exploring the

application of Facebook Prophet to time series anomaly detection with the objectives of improving precision and sensitivity. Collaborating with coworker on this project using GitHub.

Solar Site Management Service Dashboard | *Python, 2025*
Performed requirements analysis. Used third-party APIs, web scraping and Power BI to develop a tool that collects and visualises data for company solar sites from different services. Wrote scripts in Bash to automate the program's set-up process for product hand-over to non-technical end-users. Developed in enterprise environment. Evaluated scalability. Engaged with end-users to ensure requirements were met effectively via weekly sprints. Used GitHub for version control.

Multiplayer Snake.io Clone | *C#, 2024*
Collaborated with a peer using GitHub to build client and server architecture for a snake.io clone using .NET framework. The client followed model-view-controller architecture, and the entire project was built following test-driven development practices where possible. Applied understanding of networking protocols. Stored server state information in an SQL database to support multiple games running in parallel.

Neural Network from Scratch | *Python, 2024*
Implemented a 3-layer neural network from scratch to classify articles of clothing from image data. Wrote tests used to evaluate the accuracy and run-time of the network when trained on different numbers of epochs and at different mini-batch sizes.

Parallelized Mandelbrot Set Generator | *C, 2023*
Worked with a peer to parallelize generation of the Manedelbrot set using multi-threading and multi-processing. Wrote tests to evaluate and compare the performance of fork with pipes, fork with sockets and OpenMP for the parallelization of different aspects of the program. Received a personal commendation from the professor of the course for the quality and depth of the implementation and analysis.

Battleships Game with AI Player | *C, 2022*
Implemented the game in C using only the standard library with both a single and multiplayer mode. In the single-player mode, the player plays against a computer player that randomly places its ships and then uses the Battleship algorithm as its play strategy. In almost every scenario, the AI player would win. Wrote the game in a WSL environment using VIM.

CLUBS & SOCIETIES

- Club Member | *Griffith University Advanced Robotics Development, 2023-Present*
- Club Administrator | *Griffith University Gold Coast IEEE Student Branch, 2023*

OTHER WORK EXPERIENCE

- Team Member (Trade Desk) | *Bunnings, 2021-2024 (Gold Coast, QLD)*
- Video Content Producer | *The Katrina Ruth Show, 2020-2021 (Gold Coast, QLD)*
- Photo/Videographer | *Freelance, 2017-2020 (Gold Coast, QLD)*
- Service Representative | *Domino's Pizza, 2019-2020 (Gold Coast, QLD)*
- Café All-Rounder | *Michel's Patisserie, 2019 (Gold Coast, QLD)*
- Café All-Rounder | *Donut King, 2018 (Gold Coast, QLD)*

SKILLS

- Python
- C
- C#
- C++
- Unix and command-line interface (CLI)
- Software development
- Applied machine learning and AI
- Object-oriented programming
- Data science and data analysis
- Test-driven development
- Command line interface
- GitHub / Version control with Git
- Problem solving
- Writing documentation
- Communication
- Teamwork