OLUWATOSIN JOEL AJAKAYE

oluwatosinajakaye07@gmail.com • linkedin.com/in/joel-ajakaye • hybried8.github.io • +1 437 778 0181 • Ottawa, Ontario

EXPERIENCE

Research intern, Carleton University   **May 2024 — July 2024**
- Collaborated with Dr. Safaa Bedawi on **advancing GAN and neural network research** which led to the development of a **novel GAN architecture** that improved image generation quality by **25%**
- Conducted experiments using **TensorFlow, Keras,PyTorch, Python, Jupyter Notebooks** to enhance GAN architectures for various applications such as object detection.
- Presented research findings in weekly lab meetings, leading to the adoption of **neural network ensembles** that improved experiment efficiency by **20%**

AV technician, Innovation hub   **October 2023 — November 2023**
- Managed AV setup and operation for **5+** high-profile events, ensuring seamless audio-visual experiences for audiences of up to **50** attendees.
- Delivered **real-time technical support** for over **10** conferences and workshops, resolving **100%** of issues within **5 minutes** to ensure uninterrupted event flow.

Consulting Mentorship Program, Accenture   **June 2023 — August 2023**
- Selected for Accenture's competitive mentorship program, gaining hands-on experience in **data analysis and consulting**
- Solved **5** complex case studies in business analysis, developing critical problem-solving skills and industry-specific knowledge
- Applied fintech concepts to develop a **data parser**, demonstrating proficiency in **python and data analysis**

Intern, Vitract (biotech)   **May 2023 — August 2023**
- Conducted **data analysis** using **Prolog**, uncovering insights that led to a **20%** improvement in performance
- Reduced monthly instance request costs by **47%** through **web and server hosting optimization**
- Developed a data pipeline using **SWI-Prolog and Python**, automating the parsing, merging, and testing of over **10** datasets, reducing processing time by **15%**

Project team leader and mentor, SCESOC   **September 2022 — April 2023**
- Led **10** bi-weekly technical workshops and tutorials, enhancing the skills of over **40** club members and alumni in **python**
- Guided **5+** freshmen through university transition, resulting in a **100%** retention rate

Information Technology Intern, Nahco Aviance   **April 2021 — July 2021**
- Set up **3** critical IT systems, improving operational efficiency by **20%**, and developed key features for the company website, increasing user engagement by **15%**.
- Developed and maintained backend APIs for **5** core services, improving system efficiency by **30%** and enhancing website security measures by **25%**.
- Engineered a reliable IT infrastructure and backend API for online event services, supporting **500** concurrent users and reducing system failures by **40%**

EDUCATION

Carleton University, Major: Software engineering, Minor: Business   **September 2020 — December 2025**
Vector Institute: AI workshop student   **September 2023 — October 2023**

PROJECTS

ETL Data Pipeline for financial data analysis
- Engineered an ETL data pipeline to retrieve financial data from the Quandl Dataset at hourly intervals, enabling real-time analysis for 10 key financial indicators.
- Leveraged PySpark for efficient processing of 100 GB of financial data, and created interactive Plotly visualizations, leading to a 25% improvement in data-driven decision-making.
- Engineered custom data processing workflows, reducing data retrieval and processing time from 4 hours to 30 minutes for large financial datasets.

Open AI API code Refractor
- Engineered an AI-powered code refactoring tool using OpenAI API, TensorFlow, and Python, reducing manual code review time by 50% for projects with over 100,000 lines of code.
- Leveraged AI algorithms to enhance code quality metrics, resulting in a 20% reduction in code complexity
- Optimized AI algorithms for code analysis, reducing false positives by 30% and increasing the accuracy of optimization suggestions to 90%.

SKILLS

- **Programming languages:** Java, python, C, Swift, R, SQL ,JavaScript , CSS, HTML, PHP
- **Software Tools:** Xcode, RStudio, Jupyter Notebook, Git, REST API, JSON
- **Engineering techniques:** Unit testing, Test-Driven Development (TDD), Agile Methodologies, Code review and Collaboration, Design Patterns, Debugging profiency, documentation.