Austin Samuel

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EDUCATION

Illinois Institute of Technology   Chicago, IL
Bachelor of Science in Computer Science, Minor in Business – 3.5   *Aug. 2022 – Dec. 2025*
- Relevant Coursework: Data Structures and Algorithms, C Programming, Java, Database Management

iAcademy High School   Makati, Philippines
Magma Cum Laude – 92%   *Jun. 2020 – May 2022*

EXPERIENCE

AI Technical Analyst   Jan. 2025 – Mar. 2025
Kaplan Institute   *Chicago, IL*
- Identified **10+ Ollama** pipeline bottlenecks within **2 AI startups**, rejecting them for **$540K** Kaplan grant.
- Worked closely with **10+ AI Professionals** and advised against using 2.7B-parameter SLMs in complex reasoning tasks; instead, advised Chain-of-Thought for **30% fewer hallucinations**.
- Benchmarked **7 small language models (SLMs)** (Phi-3, Mistral 7B, Gemma 2B, TinyLLaMA, OLMo 1B, Mistral 7B, Qwen1.5-1.8B) for recommending alternatives **over llama3.1 8B**.

ML Researcher   Sep. 2023 – Jan. 2025
Illinois Institute of Technology   *Chicago, IL*
- Trained a random forest model using **PyTorch** to detect Multiple Sclerosis lesions in 7D MRI scans with **99.6% accuracy**, outperforming a leading PHD thesis using only **20% of the training data**.
- Analyzed **1000+ annotated MRI (T1, T2, T3)** volumes along with **UChicago Medicine** students under the supervision of Professor Keigo Kawaji.

Software Engineer Apprentice   Aug 2022 – Dec 2022
JPMorgan Chase   *Chicago, IL*
- Led full-stack development of a financial planning dashboard using **Spring Boot, Bootstrap, and JavaScript** building **RESTful APIs** for adding transactions and retrieving real-time financial data.
- Designed and implemented real-time data streaming for expense tracking using **Kafka** like message queing, reducing dashboard refresh lag by **50%**.
- Implemented unit and integration tests using **Python**, fixing **7** critical vulnerabilities.
- Created 20+ **JIRA** dashboards to visualize task progress and improving spring predictability.

Software Engineer Intern   Jun 2021 – Aug 2021
Tata Consultancy Services   *Makati, Philippines*
- Built an automated mailing bot using **C#** in **UiPath**, reducing manual workload by **70+ hours monthly** and reducing human error by **95%**.
- Reduced manual QA workload by **30%** by designing and deploying **30+** automated test cases using **.NET**, **Python** and **Selenium**.
- Designed a email **REGEX** pattern generator using C#, reducing **200+ hours monthly** on HR processing time.

PROJECTS

AuthIQ | *Python - OpenCV, Keras, Tensorflow, NumPy*   May 2025 – July 2025
- Developed an eKYC face verification app using **CNN** with an **92%** accuracy with an agumented dataset of **20,000** images.
- Designed with a **Keras** pipeline and fine-tuned to get a recall score of **90%** and precision score of **88%**.
- Trained a Siamese CNN model from scratch based on Prof. Ruslan Salakhutdinov paper from **University of Toronto**.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, JavaScript, HTML/CSS, Typescript, Powershell
Frameworks: React, Node.js, Flask, RESTful APIs, Django, FastAPI, React Native, JUnit, Material-UI, Pandas
Developer Tools: Git, Docker, Google Cloud, VS Code, Linux, VMware, Cosmos DB, PyCharm, Jupyter Notebook
Key Skills: AI/ML Integration, AWS, Azure(**Certified**), RPA(**Certified**), Software Design & Analysis, Agile/Scrum