Ashir Rashid

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EDUCATION

New York University Abu Dhabi Abu Dhabi, UAE

B.S. in Computer Science Estimated Graduation: May 2026

Relevant Courses

Algorithmic Foundations of Data Science, Network Security, Foundations of ML, NLP, Algorithms, Data Structures, Data Management and Analysis, Operating Systems, Computer Networking, Probability and Statistics, Linear Algebra

Certifications

AWS Certified Cloud Practitioner Jan 2025 - Jan 2028

WORK EXPERIENCE

GamaLearn Abu Dhabi, UAE

Data Scientist May 2025 - Present

- Designed scalable workflows for an **Airflow** ELT data pipeline, processing **100,000+** records for analytics.
- Deployed automated **Streamlit dashboards**, cutting manual KPI report generation time from ~1 hour to **minutes**.
- Conducted extensive model evaluation by **backtesting** models based on **EM**, **GMMs,** and **Bayesian Estimation** techniques, including **variational inference** and **MCMC**, to ensure accuracy and **alignment** with key metrics.
- Developed and extended models to increase accuracy by **25%** and decrease calibration ECE loss by **30%**.

eBrain Lab Abu Dhabi, UAE

Deep Learning Research Assistant May 2023 - July 2025

- Enhanced energy and memory efficiency of **Deep Neural Networks** by **8.3%**, including **Large Language Models**, through implementing a state-of-the-art quantization framework, expanding on an existing open framework (HAQ).
- Optimized quantization configurations by applying **non-linear optimization** methods (**RL, Evolutionary Search, and DNAS**), improving model performance by **15%** and reducing hyperparameter search time by **43%**.
- Streamlined experiments with an **MLFlow**-based **MLOps** pipeline, reducing experiment iteration time by **12%**.

Gantom Lighting & Controls California, US (Remote)

Full Stack Engineer Jan 2022 - Jul 2023

- Managed the creation of an accessible interactive web application, enhancing user engagement by **28%**, leveraging **Django** for back-end development and **Figma** for iterative UX design enhancements with the design team.
- Designed and deployed a **Firestore** database storing **500+** products, enabling efficient data storage and retrieval.
- Ensured seamless user access by deploying the application on **Google Cloud Platform** using **Google App Engine**.
- Reduced page load time by **22%** through database optimizations, caching, and asset compression strategies.
- Refined project outcomes by surveying customers and collaborating across teams on **Asana** and **GitHub**.

OPEN-SOURCE EXPERIENCE

IntelOwl

Open-source OSINT solution for gathering threat intelligence data Jan 2023 - Present

- Enhanced phishing defense capabilities by integrating the CheckPhish **API** with the dynamic React **front-end**.
- Optimized project scalability and collaboration by resolving **React Django** integration and **CI/CD** pipeline issues.

Learn-GDScript

Open-source educational web app developed using Godot Dec 2021 - Feb 2022

- Refined user experience by resolving an active issue in the Learn-GDScript **open-source** project with **2000+** stars.

PERSONAL PROJECTS

Source code for these projects is available on my GitHub

- Gmail RAG - **LangChain, LLMs**: End-to-end RAG pipeline for Gmail data, enabling semantic search and retrieval.
- Aixplore - **aiXplain, Multiagent LLMs**: Highly personalized travel itineraries based on your profile and input.
- Better RAG - **Elasticsearch, HPC**: Using Information Extraction techniques to improve RAG retrieval accuracy.
- Beads 12 - **Python, GDScript, Reinforcement Learning**: A game where you can play against an AI opponent.
- P2P File Sharing - **Python, Sockets**: A file transfer app utilizing a peer-to-peer approach, similar to BitTorrent.
- Ruins - **GLSL, Python, GDScript**: Shader scripts and a physics simulation model for use in video games.
- Web Crawler - **Python, Scrapy**: A web-crawler that scrapes mouse data and records all results in a spreadsheet.

SKILLS

- Languages: Python, JavaScript, TypeScript, C++, C, Bash, GDScript, Emacs Lisp, SQL, HTML, XML
- Development: Elasticsearch, Docker, Kubernetes, GitHub Actions, GCP, Firestore, HPC, Excel, PostgreSQL, Kali
- Frameworks: AWS, Git, Conda, PySpark, PyTorch, TensorFlow, MLflow, Airflow, Prefect, Burp Suite, Postman, VirtualBox, FastAPI, Tableau, Django, Scrapy, Power BI, React, Next.js, Splunk