

# Ashir Rashid

Abu Dhabi | [Portfolio](#) | [ar7789@nyu.edu](mailto:ar7789@nyu.edu) | [LinkedIn](#) | [GitHub](#) | +971568911927

## EDUCATION

### New York University Abu Dhabi

*B.S. in Computer Science*

Abu Dhabi, UAE

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

*Data Scientist*

Abu Dhabi, UAE

May 2025 - Present

- Designed scalable workflows for an **Airflow** ELT pipeline, processing **100,000+** records for analytical tasks.
- 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

*Vision Deep Learning Research Assistant*

Abu Dhabi, UAE

August 2025 - Present

- Built targeted synthetic datasets across **FLAIR**, **T1**, and **T2** modalities for **Minimum Functionality**, **Invariance**, and **Directional Expectation** tests to expose blind spots in existing losses and rigorously evaluate dataset coverage.
- Integrated **advanced loss functions**, including Generalized Surface Loss, to overcome the fundamental weaknesses of standard boundary-based and region-based segmentation losses, improving balanced accuracy by **~7%**.
- Engineered a flexible per-segment **evaluation framework** that applies metrics and losses at the lesion level, closing critical gaps in GSL and enabling far more precise **model diagnostics**.

*Quantization 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

*Full Stack Engineer*

California, US (Remote)

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.

## 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 **2,000+** 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.
- [Better RAG - Elasticsearch, HPC](#): Using Information Extraction techniques to improve RAG retrieval accuracy.
- [P2P File Sharing - Python, Sockets](#): A file transfer app utilizing a peer-to-peer approach, similar to BitTorrent.

## 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