MOHAMMED WAZIR ADAIN

+1 (470) 815-5977 | mwadain@gmail.com | Atlanta, GA, USA | linkedin.com/in/MohammedAdain/ | github.com/MohammedAdain

EDUCATION

Georgia Institute of Technology, Atlanta, GA — **May 2026 (Expected)**
Master of Science, Computational Sciences and Engineering (College of Computing) — *GPA: 4.0/4.0*
Osmania University, Hyderabad, India — **July 2021**
Bachelor in Engineering, Electrical Engineering (Silver Medalist) — *GPA: 9.26/10*

TECHNICAL SKILLS

Cloud: AWS, S3, S3 Inventory, SQS, SNS, Lambda, KEDA, Athena, WAF, EC2, EKS, ALB, KMS, API Gateway, Distributed Systems
Core Infra, SDLC and DevOps: Terraform, Kubernetes, Linux, Unix, Docker, Git, Python, Shell Scripting, CI/CD, GitLab, Apache Zookeeper, Ansible, Kerberos, OpenID Connect, OAuth, SFTP, Kerberos, Keycloak, GitHub Actions, DevOps, RHEL
Programming and Scripting Languages: Python, Java, C, Shell Scripting, Data Structures and Algorithms, Functional Programming, Haskell, Socket Programming, Networks, Operating Systems
Web Development: Postgres, SQL, Datadog, Django, JavaScript, TypeScript, HTML/CSS, Bootstrap, MEAN stack, AngularJS
Others: Object Oriented Programming, Data Visualization, Embedded Systems, OpenCV, NumPy, Spark, Pandas, Arduino, Pytest

PROFESSIONAL EXPERIENCE

Arcesium (D E Shaw, Hedge Fund), New York City, NY, USA
Software Engineer Intern- Infrastructure Team — *May 2025 - August 2025*
- Built a customer facing application empowering customers to manage AuthN/Z aspects of their environments by themselves, reducing the ops load on platform teams and reducing request turnaround time from **~3days to few minutes.**
- Revamped the container images build ecosystem significantly reducing the build times and a better SDLC pipeline for apps, by migrating from Kaniko to Buildkit.

Arcesium (D E Shaw, Hedge Fund), Hyderabad, India
Senior Software Engineer — *July 2023 - August 2024*
- Developed a business-critical customer-facing, event-driven and KEDA-scaled large-scale file ingress system (**~50k files/day**) which polls files from SFTP and FTP servers, S3 and HTTP endpoints; and archives them based on various file configurations and endpoint configurations. Ran performance Tests on the entire system to draft SLAs for the service.
- Owned and managed the critical Terraform config for the entire firm's infrastructure. Wrote multiple automations to streamline the SDLC process, thereby reducing the average time taken to ship a merge request from **~1 week to <1 day**.
- Automated Route53 entries pointing to a gRPC ingress using Terraform and other internal DNS entries, which significantly reduced ops overhead from **~3 days to 0**.
- Excellent Oncall record especially in mitigating SEV0 and SEV1 incidents.

Software Engineer — *June 2021 - July 2023*
- Built a system that attributes S3 cost to respective users (Applications teams) which involved a cronjob querying S3 inventory data with AWS Athena - realizing cost savings of **$65k per annum** on our cloud spend.
- Wrote automation which manages AWS ALBs, WAF and Route53 entries - realizing cost savings of **$120k** annually.
- Devised a system for alerting on Kubernetes Admission Controller Webhook Failures, significantly reducing SEV1 incidents.
- Created a privileged pipeline for publishing artifacts to a customer-facing SDK repository.
- Assessed Could Native Incubation project - Keycloak as an IdP for authenticating users on our platform to and third-party applications and worked with AuthN and AuthZ protocols like OpenID Connect, OAuth, SAML.
- Engineered a framework that rebuilds EC2 hosts and deploys applications to the hosts.
- Mentored a summer intern and got a znode creation automation for Apache Zookeeper delivered.

Software Engineer Intern — *February 2021 - June 2021*
- Developed and delivered a Django application that improved the observability of various services by assessing metrics from Datadog and alerts from our in-house paging software.

EdSoft Technologies Private Limited
Software Engineer Intern — *June 2020 - December 2020*
- Built a business-critical product: an Integrated Learning Management System using MEAN stack.

Sahal Business Solutions
Software Engineer Intern — *February 2020 - March 2020*
- Worked on Image Processing using OpenCV, Numpy and digital graphics.

ENTREPRENEURSHIP EXPERIENCE

Deeparrot (deeparrot.com) — *May 2023 - Present*
- Created a platform that uses a serverless backend to generate transcribes, translations and speech-to-text for media files.

PUBLICATIONS

- "Using FaaS To Invoke Long Running Jobs", 6th IEEE International Conference on Cloud Computing and Artificial Intelligence: Technologies and Applications, Marrakesh – Morocco