Syed Saad Hasan Emad

syedsaadhasanemad2000@gmail.com | +92-331-2716218 | Linkedn-saademad

EDUCATION

IBA KARACHI
MS in Data Science
Grad. Dec 2026 | CGPA: 3.96

NED UNIVERSITY
BE in Computer Systems
Grad. September 2022 | CGPA:3.882
8th Position

COURSEWORK

GRADUATE
Reinforcement Learning
Generative AI
Text Analytics
Machine Learning I
DevOps
Data Analysis and Warehousing

UNDERGRADUATE
Operating Systems
Database Management System
Data Structures & Algorithms
Computer Systems Security
Distributed Computing
Computer Communication Networks
Probability & Statistics
Digital Signal Processing
Software Engineering

CERTIFICATIONS

- AWS Machine Learning – Specialty
- Udacity Machine Learning Fundamentals Nanodegree
- Udacity AI Programming with Python Nanodegree
- MTA 98-381 Certification
- Machine Learning Stanford University
- Deep Learning Specialization Coursera
- Machine Learning in Production Coursera
- Image Processing & Computer Vision

SKILLS

PROGRAMMING
Python, SQL, Bash/Shell Scripting

FRAMEWORKS
TensorFlow, PyTorch, ONNX, LangChain, Streamlit, FastApi, OpenCV, Hugging Face

AWS
ECS, Lambda, SageMaker, CloudWatch, API Gateway, DynamoDB, SQS, ECR, SNS

OTHERS
Terraform, Docker, Kafka, Celery, ClearML

EXPERIENCE

COURO | Senior ML Engineer
Sep 2024 - Present | San Francisco, CA
Built production systems across ML, backend, Cloud DevOps, and software engineering for a sports AI platform. Developed FastAPI services for video upload, processing orchestration, model inference, and result delivery. Deployed and maintained AWS infrastructure using ECS, Fargate, SageMaker, S3, CloudFront, Cognito, DynamoDB, and Terraform, with secure APIs, blue green deployments, and scalable workflows for pose estimation and athlete performance analysis.

FOLIO3 | Software Engineer
Sep 2022 - Sep 2024 | Belmont, CA
Led computer vision and MLOps projects across object segmentation, logo classification, brand visibility analysis, and real time tracking. Architected AWS systems using ECS, Fargate, Lambda, SageMaker, SQS, API Gateway, and CloudWatch, with pipelines using Kafka, Celery, Redis, ClearML, Docker, ONNX, and TensorRT.

FOLIO3 | Associate Software Engineer
Mar 2022 - Aug 2022 | Belmont, CA
Developed real time license plate detection pipelines with ONNX and TensorRT, and built a PyQt application for testing, visualization, and deployment validation.

PROJECTS

ATHELETIA | Scalable Brand Visibility Analysis System
Developed an incremental learning approach with YOLOv8 to efficiently manage over 1,900 logo brands. Designed and deployed robust AWS infrastructure using API Gateway, Lambda, SQS, ECS, and CloudWatch. Automated infrastructure management with Terraform, ensuring scalable deployments and system reliability.

DOCINSIGHT | RAG-Enhanced Data Processing and Interaction
Developed a robust scraper service for extracting text from online sources. Created a high-efficiency vector store with LangChain, enhancing document retrieval. Implemented RAG-based querying with OpenAI and Hugging Face models for cross-lingual interactions, integrated with a Streamlit chat interface.

FIREFLY | Real-Time Tennis Ball Tracking and Optimization
Developed a real-time system for tracking tennis ball movement with high-resolution cameras. Created a mathematical algorithm to predict ball positions during missed frames, maintaining reliable tracking. Optimized for real-time performance by integrating multiple camera feeds for precise detection.

PUBLICATIONS

MEDIAEVAL MEDICO | 1st Position Task 2 2026
Calibrated Aspect-Reliable Explanations & Safety for Gastrointestinal VQA

MEDIAEVAL SYNTHETIC IMAGE | Highest F1 Open Run 2026
Multi-Backbone Frozen Features & OOF-Stacked Ensembling for Synthetic Images

ACHIEVEMENTS

- Achieved 1st Position in Folio3 Coding Champs.
- Secured 1st Position in Folio3 AI ACES.
- Claimed 2nd Position in AIC Kaggle Competition.