

Syed Abdullah Muzaffar

Karachi, Pakistan

+923172109965 

sam.muzaffar99@gmail.com 

linkedin.com/in/samuzaffar99 

github.com/samuzaffar99 

Aspiring AI Engineer and Cross Platform Developer actively involved in engineering solutions for current problems using state-of-the-art techniques, performing research and development, providing value and timely results

- Experience using OpenCV/ML (1.5+ years), Flutter (2+ years), creating and manipulating Data in Excel/Python/R (3+ years)
- Fluency in English speaking and writing (IELTS Band 8)
- Leadership and Mentoring skills

Skills

- Computer Vision, Data Science and ML (Python, R)
- Mobile/Web Development (Flutter, React (Native), Unity, Angular)
- Back-end Development (Dart, Python, C#, Javascript)
- Cloud Platforms (GCP, AWS, Azure)
- Database Systems (NoSQL, SQL, GraphQL)
- Game Development (Unreal/C++)
- UI/Digital Art (figma, Photoshop, Stable Diffusion)

Education

BS Computer Science / FAST- NUCES, Karachi

2018 – 2022

- CGPA: 3.37
- Rector's List (1st Position) – 8th Semester
- Dean's List: 2nd, 5th and 7th Semester
- ACM Web and App Development Head (Technical and Teaching)
- Google Developer's Student Club App Co-lead

A Levels / Beaconhouse PECHS, Karachi

2016 – 2018

- STEM Society (Member)
- Student Council (Class Representative)
- E-Gaming Society (Joint Secretary)

Experience

SIR Consultants / Python Engineer

Jan 2022 – Present

Part of the Data Intelligence, Innovation and Analytics team, working on developing software for actuarial science, along with engineering data pipelines

Research on Cloud Architectures and Deployment (Apache Hadoop)

- **Trisact / Python - Qt – Postgres - MySQL**

Actuarial automation software, for developing and comparing triangles from quarterly insurance data

- **Count Triangles / Python - Tkinter – Excel**

Software for counting actuarial triangles from excel files (later integrated within trisact)

- **Actuarial Pipelines / Python – Alteryx – Excel - SQL**

Workflows and Pipelines for cleaning raw insurance data, and optimizing data transformations

Generating reports and exporting usable data to SQL databases

Bleed AI / Computer Vision Engineer

Nov 2021 – Present

Research and Engineer Computer Vision projects

Create reports and produce demos for ongoing and upcoming projects

Create Blogposts on current trends in Computer Vision/AI

- **FlySight – Merlin Labs / Python - Qt – OpenCV**

Application for monitoring aircraft controls and comparing target states in real-time using various techniques

- **SwimTrack / Python – OpenCV - Notebooks**

Notebook for tracking and finding finish times for swimmers in a race

Realtime output (along with exported video and .json data), optimized for parallel processing

- **TapMeIn / React – NodeJS – GCP – Firebase - Twilio**

Website/App for SMS campaigns, using Twilio and Firebase API's

Supports queuing and rate-limiting

- **Asset Identification / Python – Qt – GCP - Scraping**

Python application for searching for product details using a given product image

Results parsed from online websites and images, using selenium and GCP Vision API

- **Pencil Rotation / Unity – Python – Tensorflow - OpenCV**

Unity application for tracking the orientation and rotation cycles of a pencil

Custom dataset collection, annotation, and training

- **Hand Sign Alphabet Recognition / Unity – OpenCV**

Unity application for performing sign alphabet recognition using SVM

- **Hand Extension / Unity – OpenCV – Python - Mediapipe**

Experimental Medical application to provide therapy for arthritis patients, using deep learning and image manipulation to stretch/widen fingers in real-time, also available on android

- **Player Identification / Python – OpenCV – GCP - PysonDB**

Online web server application to automatically tag players within marathon images using Vision OCR

Output images are organized using symlinks, with a lightweight database and logging functionality

- **Facial Feature Recognition / Python – OpenCV – Keras - Flask**

Web API's to perform face segmentation, and apply various filters

Deployed as a service on a cloud server

- **VendiSmile / Flutter - Mediapipe**

Application for vending machines to dispense gifts upon detection of smiling faces

- **HairColorizer / Python – Tensorflow - OpenCV**

Script to extract hair segments from an image, and colorize the hair

The IBL Group / IT Intern

Aug 2021 – Sep 2021

Researched and presented on various topics, such as:

Data Lakes, Warehousing, ETL Processes and Robotic Process Automation (RPA)

Developed a smartphone assistant using Google Assistant for automation

Develop a patient management system and an end-application on mobile

- **SAM – Assistant / Google Assistant - Google Actions - Python**

Developed a Google Assistant bot using Google Actions and FAST api in Python

- **Patient Management System / Flutter - Firebase - Hasura - Postgres**

Appointment management system in Flutter, as an intern project for IBL

Independent Projects

- **CV Rank / AWS - Deep Learning - NLP - Angular** 2021
Parse CV/Resumes and Rank them using AWS Services (DynamoDB, S3, Sagemaker)
Won 1st place in Amazon AWS BuildOn Hackathon, IBL Track
- **Mustaqbil / React Native - Wordpress - NLP** 2021
Family Planning Website with Chatbot
Top 5 in Make Space Hackathon by PSI
- **JS Bank FX – Remittance App / Flutter - GetX - Web Scraping** 2021
Winner of the JSBL Track, develop Remittance app using JSBank API's
Top 10 Finalist in Pakistan's largest Hackathon by RemoteBase
- **HerWork / Flutter – Firebase - Twilio** 2021
Women-centric platform for providing services
Available as both a mobile app and a WhatsApp service
- **Mukhlis – Garbage Collection / figma - React Native** 2020
Developed for the Code for Pakistan Hackathon, to help gather data for garbage hotspots
- **Scan and Learn Arabic / Flutter - Tensorflow Lite - Deep Learning** 2021 - 2022
Utilize a custom model to detect objects near Sheikh Zayed mosque
- **Multiplayer FPS Game – Personal Project / Unreal Engine** 2020 - now
First-person shooter in Unreal Engine inspired by Dust514, using Unreal Blueprints

University Projects

- **Personalized Medicine using Genomics (FYP) / R - Bioinformatics** 2021 - 2022
Development of pipeline for key gene identification and drug recommendation
Using NCBI GEO, KEGG, STRING etc databases
- **Business Card Scanner / Deep Learning - MLKit - Flutter** 2021
Business Card scanner to store contact info digitally
- **TekShop Ecommerce Store / Azure SQL - .NET Core - Flutter** 2021
Storefront to sell tech hardware, on web and mobile
- **Workout Tracker / figma - Flutter - mongoDB - Firebase** 2020 - 2021
Workout and Meal Tracker App for Android
- **Cryptocurrency Forecasting / Machine Learning - Time Series Analysis** 2021
Forecast trends in various cryptocurrencies
Using various ML models such as FB Prophet, XGBoost, SARIMAX
- **Algorithms on Android / Flutter - Algorithms** 2020
App for android demonstrating various programming algorithms using Flutter
- **pyChat Messenger / Python - tkinter - Sockets** 2021
Python Messenger application using Tkinter and TCP Sockets

Courses

- **Deep Learning Specialization - deeplearning.ai / Coursera - 2021**
- **Data Science Specialization - Johns Hopkins University / Coursera - Ongoing**
- **Introduction to Computer Science and Programming Using Python / edX - 2016**