Saqib Ali

github.com/SaqibAMA
pysaqib@gmail.com
+92-123-456-7890

Education

- **National University of Computer and Emerging Sciences** — Lahore, Pakistan
  Bachelor of Science in Computer Science; GPA: 3.8 — *Aug. 2019 – May. 2023*
  - **Honors**: Dean's List (All Semesters).
  - **Experiences**: Teaching Assistant for "Data Structures & Algorithms."
  - **Activities**: ACM-NUCES, IEEE-NUCES, & SOFTEC

Experience

- **Computational Biology Research Lab - FAST-NUCES** — Lahore, PK (Hybrid)
  Research Intern, Co-Op — *Jan 2022 - Present*
  - **Weakly-Supervised Cell Instance Segmentation in Mutli-Modality Microscopy Images**: Working on a Python and Electron.JS application for pathologists to perform inferences on whole-slide microscopy images. Implemented SOTA segmentation architectures such as UNet, SwinUNET, and Mask R-CNN. Applied pseudo-labelling, augmentations, and transfer learning protocols. Conducted experiments involving style transfer, image clustering, and object-detection. The experience is part of my Final Year Project at FAST-NUCES Lahore.
- **Cognni AI** — Tel Aviv, IL (Remote)
  Software Engineer, Co-Op — *Aug 2021 - Jan 2022*
  - **Frontend**: Overhauled the on-premise application UI. Developed the new app using React.JS and MUI. Collaborated with the marketing team to integrate Google Analytics and A/B Testing. Implemented a JSON-driven UI for pages to allow marketing staff to change components or CTAs as needed.
  - **Backend**: Designed and developed a high-concurrency micro-service using Node.JS for fetching lex rules through GraphQL, executing them on the core API via an SSH tunnel, and aggregating execution results. Improved the code to handle more than 15 thousand queries/minute.
- **MemoryMaps Inc.** — Washington, USA (Remote)
  Software Engineer, Co-Op — *Jul 2021 - Sep 2021*
  - **Design**: Collaborated directly with Forbes 30 under 30 CEO, technical project managers, and product team in brainstorming ideas, developing consensus, and taking the team into confidence regarding development strategy.
  - **Frontend**: Built the complete frontend UI with React.JS and Materialize CSS. Collaborated with design team to improve Figma mockup. Continuously refactored upon feedback to ensure high-quality interface.
  - **Backend**: Developed the complete backend to handle concurrent processing, querying, and storage actions. Created image cropping and watermarking API. Decreased image processing delays by 200x. Built modules to connect the backend to Google Cloud Platform. Deployed backend on Google Cloud Functions, Heroku, and Firebase. Identified concurrency issues through stress-testing and fixed them timely.
- **IoT Lab, University of Engineering and Technology** — Lahore, PK (Remote)
  Research Writer — *Jul 2020 - Jan 2021*
  - **Funding Proposals**: Collaborated with research supervisors to prepare lab funding proposals.
  - **Web Audit/SEO**: Conducted a thorough website audit in terms of SEO and UX to improve lab's web presence.

Projects

- **COVID-19 Classification in X-ray Images using Convolutional Neural Networks**: Tensorflow & Keras.
- **Dashcam Object-Detection using YOLOv5**: Created for Motive AI Challenge with PyTorch. Final rank 38/600.
- **Network Intrusion Detection API using XGBoost**: Scikit-learn, XGBoost, & Flask.

Programming Skills

- **Languages**: Python, JavaScript, C, C++.
- **Technologies**: PyTorch, Tensorflow, MONAI, Scikit-learn, Matplotlib, Pandas, NumPy, Flask, Node, Express, React, Next, Electron, HTML, SCSS, Material UI, Firebase, MongoDB, Mongoose, and PostgreSQL