KAMRAN NAVEED SYED

Delmar, New York · kamran.naveedsyed@gmail.com

WORK EXPERIENCE

Freelance
Fullstack Developer — Nov 2021 - Present

- Providing frontend and backend development services to clients on contract basis.
- Technologies: JavaScript, React, TailwindCSS, Redux, Material UI, Node.js, Express.js, MongoDB, PostgreSQL, MySQL, Git, AWS

SEECS IPT Lab – National University of Sciences and Technology — Islamabad, Pakistan
Assistant Researcher - Machine Learning — Aug 2021 - Jun 2022

- Research output included a conference paper titled "Performance Analysis of THz Enabled HetNets in Various Building Densities", presented at IEEE VTC2022.
- Carried out research on applied Machine Learning for Mobile Communications.
- Investigated Quality of Service for deployment of AI aided heterogeneous systems in varying building densities.
- Explored the use of Reinforcement Learning Algorithms for resource optimization in beyond 5G systems. Preliminary research demonstrated time and space superiority of AI guided techniques over traditional Monte Carlo simulations for communication system optimization.

College of Accountancy and Professional Studies — Lahore, Pakistan
Python/Linux Automation Engineer — Aug 2021 - Dec 2021

- Employed the use of Python on Linux system to automate clerical, marketing and system administration tasks for local college, leading to reduction of 40 weekly manual hours and saving PKR 60,000 monthly in labor costs.
- Automated batch file processing using Pandas for data entry, processing, cross referencing and accessing of student profiles, results and schedules to and from MS Excel spreadsheets and Oracle Database.
- Automated email template generation and delivery for updates, reminders, newsletters and attendance management using the smtplib library.
- Simplified system administration tasks for IT Lab through remote command execution and testing using the Salt library.

EDUCATION

National University of Sciences and Technology — Islamabad, Pakistan
Bachelor of Engineering – BE Electrical Engineering | *GPA: 3.61* — Sep 2018 - Jun 2022

SKILLS

Languages:	Python, JavaScript
Frontend:	React.js, TailwindCSS, MaterialUI
Backend:	Node.js, Express.js, RESTful APIs, PostgreSQL, MongoDB
DevOps:	Git, AWS

PROJECTS

AI for Resource Allocation in Beyond 5G Networks | *MATLAB, Python, GIS*
Devised a system for AI-assisted resource optimization in THz networks to be deployed in 6G systems. Traditional methods for resource allocation are mathematically complex, moved towards data-driven approach. Simulated deployment of THz network in different building densities and analyzed performance metrics. Investigated Reinforcement Learning to optimize quality of service parameters for the network.

Real Time Embedded Crop Weed Detection | *Python, Darknet, TensorRT*
Created Object Detection Model (yolov4-tiny) on Nvidia Jetson Nano for real time plant weed detection solution to be deployed on indigenously developed agricultural precision robot.
2021