Muhammad Sair

Phone: +92-379-789089 · Lahore, Pakistan
Email: msair565@gmail.com · LinkedIn: muhammadsair · GitHub: MuhammadSair

OBJECTIVE

With over one years of experience in software development, I specialize in building scalable, full-stack web applications using technologies like React.js, Next.js, and the MERN stack. My work spans micro-frontend architectures, accessible component-driven design systems, and automation testing. Alongside my frontend focus, I develop deep learning solutions for satellite imagery analysis and apply geospatial analytics in real-world contexts. Currently exploring the intersection of AI and web development, I'm eager to contribute to innovative software solutions that push both fields forward.

EDUCATION

Bachelor of Computer Science *2021 – 2025*
COMSATS University Islamabad
Relevant Coursework: JavaScript Course by Jonas Schmedtmann, Machine Learning Specialization by Andrew Ng

TECHNICAL SKILLS

Languages: JavaScript, Python, Java, C, SQL ·
Frameworks: React.js, Next.js, Node.js, TensorFlow, Keras
Tools: Git, GitHub, Strapi CMS, PostgreSQL, MongoDB, Google Earth Engine, Material UI, Tailwind CSS

PROFESSIONAL EXPERIENCE

Frontend Developer *Sep 2024 – Dec 2024*
TKTurners
• Developed two full-stack applications using Next.js and Strapi CMS: an Arabic Learning Management System (Muddersac) and a rental platform (SparkHost)
• Implemented responsive UI components using Material UI and CSS, ensuring cross-browser compatibility
• Integrated RESTful APIs with Strapi CMS backend and PostgreSQL database
• Implemented internationalization (i18n) with RTL support for Arabic content
• Converted Figma designs into pixel-perfect, responsive web interfaces

ACADEMIC PROJECTS

TerraMark – Field Boundary Identification via Satellite Imagery *Final Year Project*
• Developing a geospatial intelligence system to resolve agricultural field boundary disputes in Pakistan using satellite imagery analysis
• Training convolutional neural networks (ResNet50, ResNet101, SEResNet50V2) for semantic segmentation of agricultural parcels
• Utilizing EuroCrops dataset, Google Earth Engine, and OpenEO platform for data preprocessing and analysis
• Evaluating model performance using Jaccard Coefficient for spatial accuracy assessment
• Processing high-resolution satellite imagery for automated field delineation

NutriQuest – Nutrition Tracking Mobile Application *Mobile Development Course*
• Built a Flutter-based mobile application for daily nutrition tracking and calorie management
• Implemented food database integration with automatic calorie calculation for added foods
• Designed user-friendly interface for food logging and daily calorie count visualization
• Features real-time nutrition tracking and personalized dietary goal setting