

Muhammad Zubair Zafar

github.com/zubair480 | [linkedin.com/in/zubair480](https://www.linkedin.com/in/zubair480) | (217) 790 8056 | zubairzafar480@gmail.com | 94103, SF

EDUCATION

Eastern Illinois University, IL M.S. in Computer Information Technology GPA: 4.0	Aug 2024 – May 2026
Government College University Faisalabad, PK B.S. in Computer Science	Oct 2019 – Sep 2023

SKILLS

Languages:	Python, Typescript, Java, C++, C, PHP
AI & ML:	PyTorch, TensorFlow, Keras, Scikit-learn, OpenCV, spaCy
Web & Databases:	MySQL, SQL Server, MongoDB, SQLite, HTML5, CSS3, JavaScript
Design & Testing:	UI/UX Design Principles, Responsive Design, Unit & Integration Testing, TDD
Infra & DevOps:	Docker, Git, CI/CD, MySQL, MongoDB, Firebase, Heroku
Frameworks:	Laravel, ReactJS, Redux, WordPress, NodeJS, Express JS, Bootstrap, React Native, Flask, Angular

WORK EXPERIENCE

Eastern Illinois University	Charleston, IL
Software Engineer	Aug 2024 - May 2026
- Architected and deployed an enterprise HR System for Eastern Illinois University, serving 7,000+ active users with role-based authentication, reducing API response time by 65%, ensuring smooth performance during peak periods - Reduced manual data entry by 40% and accelerated HR request processing by 25% by automating workflow pipelines with Twilio-integrated REST APIs. - Manage and query the application's core database using SQL to support 7,000+ active users and role-based access control. - Containerize applications using Docker and worked with sysadmins to deploy via CI/CD pipelines, ensuring reliable production environments.	
WPBrigade	Sialkot, Pakistan
Backend Software Engineer	Dec 2023 - Aug 2024
- Developed and maintained 5+ production WordPress plugins with 15,000+ combined active installations, implementing custom REST API endpoints, database schema optimization, and webhook integrations - Engineered a reusable, modular framework (PHP, MySQL, JS) enabling 200+ non-technical users to build custom websites, reducing deployment time by 60%. - Mentored 3 junior developers on PHP best practices, MVC architecture, and secure coding through technical bootcamps (100+ students trained)	
Etihad Aviation Group, World Headquarters	Abu Dhabi, UAE
Software Engineering Intern at Digital Technology and Innovation Department	Sep 2023 - Oct 2023
- Productionized hackathon-winning "Smart CPM Parser" using Python, Flask, and regex to validate and auto-correct cargo performance messages, reducing manual processing time by 30% and eliminating 95% of data entry errors. - Created digital data collection application using Microsoft Power Platform (Power Apps, Power Automate) for cargo team, replacing paper-based workflows and improving data accuracy by 40% - Developed real-time travel requirements application integrating Timatic REST API with NLP models (spaCy), enabling instant visa/passport requirement verification for 200+ countries. - Developed a developer-facing tool to accelerate technical documentation by auto-generating UML diagrams from Python codebases, improving workflow for 15+ internal projects.	
CarChaze	Lahore, Pakistan
Software Engineer	Oct 2022 - Jan 2023
- Developed full-stack vehicle marketplace application using the MERN Stack (MongoDB, Express.js, React.js, Node.js), serving 2,000+ monthly users. - Engineered 10+ core REST APIs in Node.js/Express.js to serve 2,000+ monthly users, optimizing data retrieval and reducing processing speed by 15%. - Deployed applications on Firebase and Heroku, managing continuous integration and delivery processes.	

RESEARCH EXPERIENCE

Eastern Illinois University	Charleston, IL, USA
Research Assistant to Professor Md Farhadur Reza	Aug 2025 - May 2026
- Build and train deep learning models (YOLOv8, PyTorch) for multi-class medical image classification on 80,000+ labeled MRI scans, achieving 97.2% test accuracy and 95.8% F1-score. - Develop an end-to-end data pipeline with preprocessing, augmentation (rotation, flipping, scaling), and GPU-accelerated training on Google Colab Pro, reducing training time by 70% - Implement evaluation metrics (accuracy, precision, recall, F1-score) and automated performance monitoring with early stopping.	

HACKATHON PROJECT

EstateAgent AI - HackIllinois 2026 (GitHub) (Live)	Mar 2026
Hyper-Local Real Estate Intelligence System	
Used: Python, FastAPI, Cloudflare (Workers, Durable Objects, KV, D1, R2, Vectorize), Modal, Aedify.ai, Redfin API, LLMs (Qwen 2.5, Llama 3.1)	
- Engineered a highly resilient global edge delivery network using 7 Cloudflare primitives to manage stateful WebSocket connections and stream real-time pipeline progress. - Deployed the full-stack multi-agent AI application on Aedify.ai, bridging Modal's heavy serverless GPU backend with Cloudflare's edge workers to process 5,000 parallel Monte Carlo simulations in under 12 seconds.	