# Arshad Jafri S MD

 • Dallas, TX, USA ■ arshadjafrisheikh@gmail.com
 □ 817-798-0463
 □ in/smdarshadjafri
 • www.codebyarshad.com/

#### **EXPERIENCE**

#### Web Developer

#### Office of Information Technology, University of Texas at Arlington

July 2024 - Present, Arlington, TX

- · Overhauled the UTA Provost Department webpage, improving accessibility and performance by 80% within a tight deadline through optimized front-end development.
- Developed and customized department–specific websites on WordPress and Sitecore, implementing HTML, CSS, and JavaScript to create responsive, user–centered solutions.
- Ensured 100% compliance with DOJ and WCAG 2.1 standards by applying advanced remediation techniques, enhancing accessibility and usability across all devices.
- Optimized UTA's digital presence, reducing page load times by 50%, improving SEO, and ensuring seamless deployment through DNS configuration and network optimizations.

#### Software Developer - Junior Product Specialist

#### **Cognizant Technology Solutions**

#### September 2021 - December 2023, Chennai, India

- · Led the end-to-end software development lifecycle, designing, developing, and maintaining scalable enterprise solutions for India's largest insurance company using Java, Spring, JSP Servlets, Python, MySQL, HTML, CSS, and JavaScript.
- · Implemented industry-standard security protocols and design patterns, enhancing application security and boosting performance by 40% through optimized development practices.
- Diagnosed and resolved over 95% of system defects, delivering expert technical solutions that ensured seamless execution and uninterrupted business operations.
- · Conducted in-depth root cause analysis, leveraging data analytics to reduce system downtime by 25% over six months, improving overall application stability and efficiency.

## **PROJECTS**

## Image Fusion: Inpainting Targeted Areas on a Background

January 2025 - February 2025

- Developed an AI-powered inpainting pipeline using Hugging Face and DreamBooth models, transforming 5 source images into a 100-image dataset through advanced data augmentation techniques.
- Trained a deep learning model to seamlessly integrate images into designated background areas, ensuring natural transitions and high visual fidelity.
- Implemented advanced image processing techniques such as color correction, edge smoothing, and artifact reduction to enhance the realism of inpainted images.
- Optimized model performance using GPU acceleration, fine-tuning, and batch processing, reducing computational overhead while improving output quality.

#### **Conference Management System**

October 2024 - December 2024

- Designed and developed a full-stack Conference Management System using React for the frontend and PHP for the backend, ensuring a seamless user experience.
- Implemented core functionalities such as user authentication, session scheduling, speaker management, and attendee registration with a responsive UI.
- Optimized backend performance by integrating RESTful APIs, database management (MySQL/PostgreSQL), and secure authentication protocols for efficient data handling.
- Enhanced system scalability and maintainability by applying modular architecture, caching strategies, and robust error handling, ensuring a high-performance platform.

#### Image Processing for Disaster Detection and Patient Weight Measurement

October 2023 - October 2023

- Developed a disaster detection system using UAV-captured images and machine learning models (Scikit-learn, TensorFlow) to classify disaster types and generate real-time recommendations for emergency response teams.
- Implemented advanced image processing techniques to analyze aerial imagery, enhancing feature extraction for accurate disaster identification and impact assessment.
- Designed an ICU patient weight measurement solution using image-based tracking of piston displacement, eliminating the need for direct patient handling and improving hospital workflow efficiency.

• Optimized MATLAB-based algorithms for precise weight calculation, ensuring high accuracy, minimal error rates, and seamless integration into medical equipment.

## **EDUCATION**

## Master of Science in Data Science

University of Texas at Arlington · Arlington, TX · 2025 · 3.67

- · Concentration in Data Science and Image Processing, with expertise in extracting insights from complex datasets and developing data-driven solutions.
- · Coursework: Machine Learning Techniques, Statistics, Full-Stack Development, Project Management, and Data Optimization.

## **SKILLS**

- · Programming Languages: Java, Python, R, MATLAB, C, JavaScript (ES6+), TypeScript
- Front-End Development: HTML, CSS, JavaScript, React.js, Next.js, AngularJS
- · Back-End Development: Node.js, Express.js, PHP, RESTful APIs, GraphQL
- · Frameworks & Libraries: TensorFlow, PyTorch, Scikit-learn, Keras, NumPy, Pandas, Matplotlib
- · Database & Versioning Tools: MongoDB, MySQL, PostgreSQL, Firebase, Git, GitHub
- Containerization & DevOps: Docker, Kubernetes, CI/CD Pipelines