# **Ashutosh Zawar**

+1 7043639906 | ashujzawar5@gmail.com | linkedin.com | Github.com

#### **EDUCATION**

# M.S. in Computer Science, University of North Carolina at Charlotte, NC (GPA 3.7)

Aug '23 - May '25

Coursework: Network-based Application Development, Database Systems, Algorithm & Data Structures, Intelligent Systems, Computer Communications and Networks

## B.E. in Computer Science Engineering, Vishwakarma Institute of Technology, Pune, India (GPA 3.4)

Aug '19 - June '23

Coursework: Design and Analysis of Algorithms, Computer Architecture & Operating Systems, Data Science, Data Structures, Artificial Intelligence, Data Communication and Networks

#### **WORK EXPERIENCE**

Book By Slot

Data Research and Management Intern

India Nov '21 – Jan '22

Engaged with over 15 financial institutions in agriculture, achieving a 30% increase in outreach efficiency; conducted in-depth research on MSMEs, leading to the development of tailored financing solutions. Utilized data analysis and web application development, enhancing customer interaction by 40%, which resulted in establishing connections with over 20 clients and a 25% improvement in project management and communication skills.

### **SKILLS**

- Programming Languages: Python, C, C++, JAVA
- Libraries: Keras, NumPy, Pandas, Matplotlib, TensorFlow, MlFlow
- Cloud and Front-End Technologies: AWS, HTML, CSS, JavaScript, Bootstrap, Angular.js, React.js, Tableau
- Back-End Technologies: MySQL, SQL, Node.js, PHP, Express.js, Django, MongoDB

#### **ACADEMIC PROJECTS**

## Semiconductor Wafer Defect Detection Using Deep Learning (Final Year Project)

Feb '23 - May '23

- Revolutionized semiconductor defect detection by skillfully implementing advanced YOLO v8 and v5 models, achieving a remarkable 96% accuracy and significantly streamlining complex quality control processes
- Innovatively addressed the critical industry need for enhanced defect identification in semiconductor manufacturing, masterfully automating the detection process with groundbreaking precision and efficiency

### **MERN Stack Project**

Oct '23 – Dec '23

- Developed a MERN stack-based personal budget web application with intuitive UI (React.js), secure login, and interactive dashboards. Integrated MongoDB and DigitalOcean for backend services, enabling efficient financial tracking with visualization
- Addressed the need for an effective online budget management tool, resulting in a responsive, cross-platform application. This significantly enhanced user experience in personal budget tracking and demonstrated advanced full-stack development skills

## Financing System

Sept '22 – Dec '22

- Identified the need for simplified loan access for small entrepreneurs and initiated the development of an online platform to connect them with high-yield lenders, focusing on reducing traditional loan paperwork
- Successfully developed and launched a streamlined lending platform, which significantly improved the efficiency of lender-borrower connections, thereby enhancing short-term loan accessibility for small business owners

#### **Stock Price Prediction**

Sept '21 – Dec '21

- Addressed the need for sophisticated stock analysis in finance by developing a Python application with LSTM networks, incorporating Keras, TensorFlow 2.0, Matplotlib, and Sklearn for significantly enhanced data
- Achieved successful stock price prediction, demonstrating the application's capability in robust technological integration for accurate financial forecasting

## **Fake Image Detection System**

Sept '20 – Dec '20

• Developed a Python-based GUI for detecting JPEG image modifications, integrating advanced techniques like Metadata and Error level analysis, resulting in a precise, robust system for reliable alteration detection and enhanced authenticity verification.

# **CERTIFICATIONS & ONGOING EDUCATION**

- Google Data Analytics Professional Certificate
- Artificial Intelligence A-Z: Learn how to Build An AI
- Ultimate AWS Certified Cloud Practitioner
- The Data Science Course 2022: Complete Data Science Bootstrap
- The Complete 2020 Fullstack Web Developer Course

#### **ACHIEVEMENT**

# Paper Publication of Semiconductor Wafer Defect Detection Using Deep Learning

May '23

• Published in HTL Journal(High Technology Letters) Volume 29, Issue 5 | Impact Factor: 2.7