# Mohammad Zarak Shah ji

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#### WORK EXPERIENCE

#### **Software Engineer** | BMW of North America

Sept 2022 - Present

# C#, .Net, Angular, Express.js, JavaScript, MySQL, JSON, TDD

Oxnard, CA

- Working on a car scheduling app to automate emissions testing process pipeline, achieving 95% validity in car tests
- Drove remarkable enhancement of the application by implementing four cutting-edge features: car test scheduling, test sequence editing, signup page creation, and calendar integration, boosting overall functionality by 75%
- Implemented admin access for 90% of the functionalities using authentication guards, resulting in a 100% improvement in application security and a significant reduction in car information mishandling incidents

**Desktop Support Specialist** | California State University Northridge

Apr 2022 – Aug 2022

### PowerShell, JAMF, SCCM, Git, Unix

Los Angeles, CA

- Spearheaded technical support to users in-person, over phone, and remotely resulting in 97% customer satisfaction
- Resolved hardware/software issues for over 500 users, with a ticket closure rate of 95% within service agreement

# Research Assistant | Sandia Labs

Sept 2021 - Mar 2022

### Python, YAML, CNN, Kubernetes, Docker, VM

Los Angeles, CA

- Conducted penetration testing on microservices applications, leveraging deep learning techniques to analyze patterns and predict potential attacks, resulting in a system with a reduced risk of successful cyber-attacks by 98%
- Deployed the DeathstarBench social network app on Kubernetes, achieving 100% functionality of the application
- Employed Repulsive Grizzly app to conduct DDOS attacks, resulting in identifying 10+ vulnerabilities in microservices

## Full Stack Developer | University of Kashmir

Mar 2020 - Aug 2021

## Python, Django, PostgreSQL, Heroku, UML, Agile

Kashmir, India

- Developed and managed an e-commerce web application utilizing Python's Django framework, guaranteeing both functionality and scalability, resulting in a 55% boost in website traffic and a 30% surge in sales revenue
- Delivered customer-centric enhancements by implementing key features like "add to cart" and "wish list," driving an outstanding 95% increase in customer satisfaction
- Wrote REST APIs to perform CRUD operations, resulting in an API response time of less than 100ms and handling over 10,000 requests per minute

# Frontend Developer Intern | BMCP Solutions

Nov-2019 - Feb 2020

#### HTML, CSS, Bootstrap, JavaScript

Delhi, India

- Developed a new business website, leading to a 50% increase in traffic, a 70% boost in user engagement
- Organized the CRM software by understanding KPIs, leading to a 99% improvement in customer satisfaction ratings

#### **SKILLS**

**Languages**: Python, Java, C, C++, C#, JavaScript, TypeScript Frameworks: Angular, Django, Node.js, PyTorch **Databases & Cloud**: MySQL, PostgreSQL, MongoDB, Docker, Kubernetes CI / CD: Git, GitHub, GitLab, Asana

## **EDUCATION**

### California State University Northridge

Aug 2021 - May 2023

Master of Science in Computer Science | GPA: 3.97 | Outstanding Student Award

# **University of Kashmir**

Dec 2016 - Oct 2020

Bachelor of Technology in Computer Science and Computer Engineering

#### **PUBLICATIONS AND PROJECTS**

# Predictive Modeling of Diabetes Onset and Survival Analysis Among Diabetic Patients

Publisher: IEEE

• Uncovered novel insights into heart failure risk among diabetic patients using the Random Survival Forest machine learning model, unveiling previously undiscovered correlations with 90% accuracy

#### Driver Drowsiness Detection | Scikit Learn, Matplotlib, YOLO v5, PyTorch, NumPy, LSTM, OpenCV

• Revolutionized driver safety technology by analyzing drowsiness detection techniques, specifically focusing on facial features. Identified the most effective method with 95% accuracy

# Crazy Crypto | Angular, Node.js, CoinCap, Express.js, Firebase

• Built a real-time updating app for prices, news, and graphs of cryptocurrencies, yielding an informative platform

#### **LEADERSHIP**

**IEEE Beta Kappa Nu:** Research Bootcamp Mentor responsible for educating and giving advice to 300+ students **BUILD PODER**: Led tutoring classes with rectitude, fostering collaboration, and 75% refinement in student performance