# **Mohit Rachuri**

+1 (815) 217-9402 ◆ rachuri.mohit@gmail.com ◆ linkedin.com/mohitrachuri ◆ github/mohitrachuri ◆ Herndon, VA

## PROFESSIONAL SUMMARY

Inquisitive, Experienced Software Engineer with 3.5 years of diverse work experience in the field of software development. I love to brainstorm on new ideas, business problems and find Simple and Scalable solutions for them.

## **WORK EXPERIENCE**

Amazon Herndon, Virginia

### Software Development Engineer

July 2023 - Present

- Integral member of the Device & Services Trust and Security group, focused on advancing security protocols for Amazon devices and services, with a key emphasis on transitioning to post-quantum cryptography.
- Developed a robust post-quantum cryptography library, incorporating a low-level singleton logging interface to enhance security and performance.
- Engineered ASN.1 elements using a linked list structure to dynamically build security mechanisms supporting multiple generic and post-quantum algorithms.
- Played a crucial role in refining and centralizing the security review processes for onboard device builder teams, significantly improving efficiency and consistency across the organization.
- Implemented mechanisms that streamline and centralize security tooling, resulting in substantial time savings for builder teams and enhancing the overall security infrastructure of Amazon devices and services.

Nationwide Financial Herndon, Virginia

## Software Engineer II

March 2023 - June 2023

- Contributed to the core policy engine, improving the process of policy creation and assignment based on user inputs, enhancing accuracy and efficiency.
- Played a pivotal role in the Nationwide Connect initiative, replacing the existing user-facing insurance quote generation platform with a more robust and user-friendly system.
- Developed and maintained both frontend and backend components of the platform, utilizing modern frameworks and technologies to ensure seamless user experience and reliable performance.
- Collaborated with cross-functional teams to integrate new features and improve existing functionalities, resulting in a more comprehensive and user-centric insurance solution.
- Leveraged expertise in AWS and containerization to optimize application deployment, scalability, and maintenance, ensuring high availability and performance of the Nationwide Connect platform.

## **University Of Maryland**

## Software Engineer II

College Park, Maryland

October 2021 - February 2023

- Maintained and refactored a web-based incentivized administration and transportation data analysis system on AWS using React.js, Node.js, MongoDB, Nginx.
- Refactored and executed a modularized RESTful API-based traffic simulation website using Flask, React.js, Material UI and Mapbox GL. Designed database schema supporting 10G raw data, and reduced the response time from 2s to 400ms.
- Designed and implemented user interface and Created custom directives in **Reusable components** (multi-field form elements, background file uploads).
- Work on data visualization and machine learning models for predictive modeling/ analysis systems.
- Developed algorithm to identify dynamic patterns detected in data that is used for predictive analysis, information loss approximation, feature detection.
- Built a UI Dashboard using Vue JS, for the users to see data of various sensors using Chart JS and send alerts when an abnormal activity is detected.

## **Accenture Solutions PVT LTD**

Bengaluru, India

## **Application Developer (Full-Stack Development)**

January 2020 - July 2021

- Worked with Business Problem Analysis, Design Analysis, Agile Planning.
- Coded the frontend using Oracle Tools (ADF) and backend internal flow using Bootstrap, JQuery.
- Architected and administered Restful APIs using Node.JS, Connecting to Oracle Databases.
- Used SVN for version control for project and issue tracking. Involved in integration testing and defect fixing.

• Deployed applications on multiple WebLogic Server instances and maintained Load balancing, High availability and fail over for the server. **Log4J** helps for logging purposes and debug levels are defined for controlling what we log.

#### **TECHNICAL SKILLS**

**Proficient in:** Python, Java, JavaScript, C++, Rust, TypeScript.

Front End: React JS, Angular Js, Html5, CSS, Bootstrap, J Query, Material UI.

Back End: NodeJS, Flask, Spring, Express JS.

Cloud Technologies: Azure, AWS (EC2, S3, lambda, API Gateway, Fargate, Cloud Formation etc).

Containerization: Docker, Kubernetes || Repository Control: Git, GitHub, Bash, Gitlab, JIRA, Azure pipelines.

**Databases:** MySQL, PostgreSQL, Oracle DB, MongoDB, AWS DynamoDB, CockroachDB. **Soft Skills:** Initiative, Leadership, Resourcefulness, Communication, Public Speaking.

#### **EDUCATION**

University of Maryland, College Park

College Park, Maryland

Masters in Software Engineering

August 2021 – December 2022

SRM Institute of Science and Technology

Chennai, India

Bachelors of Technology in Electronics and Communication Engineering

June 2016 – July 2020

#### ACCOLADES & EXTRA-CURRICULAR

Outstanding contribution to the development of our new project at UMD, with a 20% increase in efficiency.

Spot Award (Accenture) in recognition of ability to solve complex problems and innovate solutions.

May2021

Detection of Glaucoma Using Fundus Images of Retina

January 2020 - July 2020

- Worked as a lead in Developing and Publishing the Research Paper. ISSN: 2347-7180.
- Presented a computational tool for automatic glaucoma detection. Researched and reported improvements for disc segmentation, and a **Deep Learning Neural Network Box** method to classify the disease.