Uditraj Singh Rathore

GitHub Link: https://github.com/uditraj1 | Portfolio Website: Uditraj Singh Rathore Portfolio (uditraj1.github.io)

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EDUCATION

University of Maryland — College Park, MD
M.Eng of Software Engineering — August 2022 - May, 2024 (Expected)

SRM Institute of Science and Technology — Chennai, India
B.Tech, Computer Science and Engineering — July 2016 - May 2020

PROFESSIONAL EXPERIENCE

Fraunhofer USA Center Mid-Atlantic (CMA) — Riverdale Park, MD, USA
Web and ML Engineer — January 2023 - Current

- Managed a secure, remote working environment by implementing virtual desktop for the engineering team, resulting in a 30% increase in productivity
- Utilized Power Shell to automate routine tasks, boosting efficiency in web and machine learning model development
- Implemented distributed computing techniques to enhance web application and machine learning model performance, resulting in a 25% increase in efficiency
- Incorporated SQL schema in developing robust databases, resulting in a 20% improvement in efficiency for managing large datasets for machine learning applications

Ford Motor Company — Chennai, TN, India
Software Development Engineer — July 2020 – May 2022

- Implemented Azure cloud services to optimize web application performance and scalability in a high-traffic environment, leading to a 30% improvement in efficiency
- Constructed software services to design, develop, and maintain complex web applications, prioritizing user experience and performance, resulting in a 20% improvement in system efficiency
- Designed and developed RESTful APIs using OpenAPI specification, boosting application efficiency by 35%

Vinfotech — Indore, MP, India
Web Development Intern — June 2017 – June 2017

- Utilized technical engineering skills to develop, test, and maintain robust web platforms, resulting in a 25% improvement in overall efficiency
- Demonstrated ability to deliver results under tight deadlines, leading the design and deployment of software applications, resulting in a 20% increase in project completion efficiency

TECHNICAL SKILLS

Programming/Technical Skills: C, C++, C#, Java, J2EE, JavaScript, TypeScript, HTML/HTML5, Python, CSS, REST APIs, Code Reviews, Design Review, Data Structures, Algorithms, Coding Standards, Linux, Design Patterns, High-Quality Code, Best Practices, Front End Development, QA, Back End Development, Code Reviews, Kubernetes, Microsoft Cloud, Software Development Life Cycle (SDLC), Build Processes, Software Solutions, Machine Learning (ML), TCP/IP, UI/UX, CI/CD Pipeline, MS SQL Server, MySQL, DynamoDB, MongoDB, NoSQL DBs, SQL Database

Tools/Additional Skills: Visual Studio Code, Git, Jenkins, Angular, React.js, Vue.js, Google Cloud Platform (GCP), Node.js, Unit Testing, Amazon Web Services (AWS), EC2, Distributed Systems, Integration Testing, Spring Boot, Kafka, Technical Requirements, Networking, Agile Methodologies, Product Reliability, Office 365, Troubleshooting, Windows Server, Resiliency, Encouraging, Leadership, Curiosity, Innovative, Creativity, Versatility, Determined, Leader

PROJECTS

- **Railway Obstruction Detection System with IoT and Arduino (May 2020):** Safety system with UV sensors (obstacles), MEMS sensors (track faults), and eye-blink sensor (drowsy operators) to prevent accidents
- **Views Per Day Prediction Machine Learning in Python and Scikit Learn (Oct 2022):** Developed and evaluated models to predict daily movie views using data cleaning, feature engineering, visualization, and model selection
- **Face Recognition Tool Using Python (April 2023):** A Python-based project offering diverse face recognition functionalities, including face detection, verification, attribute analysis, embedding generation, and face identification
- functionalities
- **E Learning Management System (LMS) on React, Java and Spring Boot (Oct 2023):** Developed React & Spring Boot e-learning platform: signup, login, admin controls (courses, students), email verification, enrollment, dashboards, material access, grayscale mode, & instructor features