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
- Current GPA : 3.716/4

SRM Institute of Science and Technology Chennai, India
B.Tech, Computer Science and Engineering July 2016 - May 2020
- Percentage : 84.66

TECHNICAL SKILLS

Programming/Technical Skills: C, C++, Java, JavaScript, System Design, TypeScript, HTML/HTML5, Python, PHP, CSS, REST APIs, Linux, Data Structures, Artificial Intelligence (AI), Web Services, Reverse Engineering, R&D, 3D Printing, Backend Development, Object-Oriented Design, Production Support, Web Development, Code Reviews, Data Science, Machine Learning, Algorithms, Windows, Code Quality, QA, Maintenance, Configuration Management, Database Systems, UI/UX, CI/CD, SQL Server, DevOps, Software Solutions, Software Development Lifecycle (SDLC), Data Analytics

Tools/Frameworks: Eclipse IDE, Visual Studio Code, Git, Jenkins, Adobe Photoshop, Angular, React, Google Cloud Platform (GCP), Blender 3D, Adobe Experience Manager (AEM), Scrum, Unit Testing, Debugging, Logging, Amazon Web Services (AWS), Prototypes, Performance Testing, Agile Software Development, Spring Boot, .NET, Technical Documentation, Tests Automation, Troubleshooting, Integration Testing, Production Deployment, Node.js, Cloud Computing

TECHNICAL EXPERIENCE

Fraunhofer USA Center Mid-Atlantic (CMA) Riverdale, MD, USA
Web Development and Machine Learning Intern January 2023 - Current
- Engaged with AEM to build and update the company website and made design changes as required, resulting in 30% faster updates and delivery to end-users
- Created prototypes and experimented with new technologies to enhance website experience, a 15% faster loading time and improved performance
- Explored and optimized open-source ML tools for company-specific use cases, with a 30% increase in data analysis efficiency and accuracy
- Directed improvement in face recognition by 40% through YAML configuration changes and Docker container optimization
- Developed an object detection tool using Python that was tested by another AI, resulting in a 25% improvement in accuracy compared to previous models.
- Worked on 3D printing and 3D simulations related research and reverse engineered required results, improving project completion efficiency by 30%

Ford Motor Company Chennai, India
Software Engineer May 2022 – August 2022
- Programmed for a team providing websites/applications incorporated by car dealerships across different countries to improve business growth by 80% or more
- Debugged software using Eclipse debugger and Liberty server, with local environment checks prior to deployment, leading to 98% fewer bugs
- Implemented Jenkins for Continuous Integration/Continuous Deployment, using Groovy scripts to build data pipelines and validate code, causing a 20% decrease in deployment time
- Influenced Optimized server and database performance for faster, more interactive software and reduced waiting time by 20%

Junior Software Engineer July 2020 – May 2022
- Increased developer productivity by 20% via clean code writing for front/back-end, Postman testing, and local server generation to minimize future code improvements
- Reduced downtime by 50% by providing technical support to the business team during production environment issues
- Enhanced UX by 25% and customer satisfaction/retention by 20% with program flow optimization via API/RESTful service development
- Improved Boosted app performance by 20% via Java backend, Angular frontend with JavaScript/TypeScript and Microsoft SQL database

Viscus Infotech Limited (Vinfotech) Indore, India
Web Development Intern June 2017 – June 2017

- Performed or directed website updates to improve the web page from a customer's perspective and also to get a better performance, providing a 15% decrease in bounce rate
- Increased mobile traffic by 30% with responsive website design compatible across all devices
- Boosted user engagement by 15% by writing, designing, or editing web page content to meet company needs

PROJECTS

Railway Obstruction Detection System with IOT and Arduino –

- Built a project for automatic obstruction detection on trains to prevent fatal railway accidents
- Employed Detected distance/faults with UV/MEMS sensors and prevented drowsiness with an eye-blink sensor

ATM System in Java –

Implemented Java code for ATM System with balance display, deposit, withdrawal, and balance update

Hotel Management System in C++ -

Constructed a C++ project for hotel guest features such as check-in/out, payment amount, and guest details

Views Per Day Prediction Machine Learning in Python and Scikit Learn –

Performed Analyzed data to predict daily movie views by end-to-end approach, selecting optimal model