Richa Maurya

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EDUCATION

University of Southern California - Viterbi School of Engineering

Master of Science in Computer Science

Relevant Coursework: Analysis of Algorithms, Database Systems, Web Technology, Data Science in Machine Learning

Galgotias College of Engineering and Technology- Dr A.P.J. Abdul Kalam Technical University Bachelor of Technology in Information Technology

• Relevant Coursework: Data Structures, Design and Analysis of Algorithms, Database Management System and Software Engineering, Computer Networks

TECHNICAL SKILLS

- Programming Languages: Python | Java | C# | HTML | CSS | JavaScript | SQL | Shell | Bash
- Web and App Development: JavaFX | Flask | ReactJS | REST | MySQL | PostgreSQL | Docker | Agile
- Machine Learning: NumPy | SciPy | Pandas | Scikit-Learn | Matplotlib | TensorFlow
- Automation and Tools: Jenkins | Unity | Selenium | Confluence | Jira | ArcGIS | IntelliJ |AWS | Git | Linux

EXPERIENCE

ESRI - Environmental Systems Research Institute

Software Developer Intern

- Built features for cross platform application ArcGIS Maps for Java SDK, using JavaFX, FXML, CSS, worked across Windows, macOS, and Linux operating systems, enhancing user experience.
- Implemented a robust shell script for automating pipeline job execution on Jenkins, improving build and deployment efficiency.
- Conducted test driven development by executing automated tests ensuring top quality of code and compatibility across different operating systems.

Cognizant Technology Solutions

Software Engineer

- Developed a web application module for healthcare project using JavaScript, RESTful web services, conducted end-to-end testing, ensuring quality, functionality, and reliability of software
- Investigated and analyzed real time production issues by debugging code, delivered fixes and workarounds, and reviewed changes to maintain existing software solutions, resulting in delivering software with less than 1% defect
- Identified and logged defects, engaged in scrum meetings, collaborating with development teams for timely issue resolution and contributing to 30% reduction in manual testing efforts within agile environment.
- Took initiative to optimize Automation process by incorporating reusable methods, integrating CI/CD best practices, • Identified and removed redundant methods resulting in a significant 15% reduction in deployment time.

Programmer Analyst

- Sept 2018-Aug 2019 Implemented executable file in python to convert generated HTML test reports into customizable PDF files based on the client's requirement, thereby decreasing manual efforts to convert HTML files into PDF by 80%.
- Gathered client business requirements, assessed risks, and documented test artifacts on Jira and Confluence.

RESEARCH EXPERIENCE

- Text Summarization of Medical reports: Utilized Large Language Model for both abstractive and extractive text to determined most suitable approach for summarizing complex medical documents
- Consumer behavior Analysis applying Logistic Regression: Analyzed consumer behavior with consumer purchase data to provide retailers better business strategies and to enhance effectiveness of targeted promotions.

PROJECTS

- GeoRisk Pro: Developed an app to determine risk of natural hazard occurrences like volcanoes, earthquakes, etc. for any month across the United States leveraging RESTful Web Service, typescript, python, spatial analysis and arcGIS api.
- Personal Organizer: Built a web-based application leveraging HTML5, CSS, JavaScript. Provided tracking of birthdays, money borrowed or lent and weekly goals, to help users manage expenses.
- Memory Efficient Gene Sequence Alignment Problem: Designed and devised memory efficient algorithm for sequence alignment problem with 21% more efficiency than Dynamic programming solution.
- Game Application 'Tasty Tracks': Collaborated with a team of four to design a 3D game in Unity and C#, implementing immersive gameplay mechanics, interactive environments, and realistic physics simulations.

Jan 2022-Dec 2023

Los Angeles, CA

Greater Noida, IN Aug 2014-Jun 2018

Redlands, CA May 2023-Present

Bangalore, IN Aug 2019-June 2021