THIRUMALAREDDY DIVYA DEEKSHITH REDDY

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PROFESSIONAL SUMMARY:

I am a motivated software developer with a specialization in Backend and Frontend development, particularly using Java, Python and related frameworks. I possess strong skills in several programming languages, including Java Script and have hands-on experience in developing and maintaining Restful applications. I have demonstrated the ability to lead projects and collaborate effectively within cross-functional teams. I am eager to leverage my education and experience to create impactful software solutions and tackle new challenges in the tech industry.

SKILLS:

- Programming Languages: Java, Python, C, C++, JavaScript
- Frontend Development: Angular, React, React Native, HTML, CSS
- Backend Development: Node.js, Django, Spring Boot, J2EE
- Databases: MySQL, PostgreSQL, MongoDB, Redis, Apache Cassandra
- DevOps and Cloud: AWS(ECS,EC2,Lambda), Azure, Continuous Integration (CI/CD): Jenkins, GitHub Actions, Docker, Kubernetes
- Frameworks and Libraries: MapStruct, Apache Camel.
- Project Management Tools: JIRA, Agile Methodologies, Git, Gerrit
- Other Skills: Data Structures and Algorithms, RESTful APIs, Object-Oriented Programming (OOP), SDLC, Linux, IoT, Messaging Systems (ActiveMQ),AI/ML, UI.

EXPERIENCE:

Software Developer at Techciti, J.P.Nagar, Bangalore, Karnataka 05/2021 - 05/2022

- Led a team of 3 developers in designing and deploying a scalable Loan Data Prediction system, ensuring project success and on-time delivery.
- Managed project timelines using Agile methodologies, facilitating efficient sprint planning and task delegation.
- Regularly liaised with clients and stakeholders to gather requirements and provide project updates, enhancing collaboration and transparency.
- Implemented CI/CD pipelines using Jenkins to automate testing and deployment, reducing manual errors and deployment time.
- I played a key role in developing and maintaining the system using Python and Artificial Intelligence (Machine Learning), used RESTful API's to develop the code.
- Developed Python scripts to automate repetitive tasks, saving 10 hours weekly for the team
- Designed SQL queries and stored procedures, reducing data retrieval times by 15%
- Worked with a team to launch a website feature, contributing to a 20% increase in user engagement
- Enhanced data validation process using Pandas, improving data accuracy by 25%
- Additionally, I designed and implemented a User Interface, enhancing user experience and usability with the help of CSS, HTML and Java Script using React framework .
- I significantly contributed to enhancing the system's configurability, enabling users to define new routes and manage existing ones without the need for technical intervention, which emphasized innovation with the help of SDLC.
- Collaborated with cross-functional teams to implement cloud-based solutions, leveraging AWS for scalable deployments.
- Furthermore, I exhibited strong project management skills by coordinating version management and development workflows, optimizing the system's performance and efficiency while focusing on effective project management.
- Successfully managed stakeholder communication to ensure project delivery within deadlines.

PROJECTS:

E-Commerce Order Management System:

- I developed a scalable e-commerce system based on microservices, creating distinct services for user management, product management, order management, and notifications using Spring Boot.
- For the relational database management, I implemented PostgreSQL, complemented by Redis for caching to enhance performance.
- I integrated ActiveMQ for asynchronous messaging between services, utilized Apache Camel for efficient routing and message processing and used Cassandra for data Storage.
- To provide real-time notifications, I employed WebSocket technology, keeping users informed about their order status.
- Additionally, I containerized the microservices using Docker and deployed them on a Kubernetes cluster to improve scalability and reliability.
- For testing, I used JUnit, and for efficient Data Transfer Object (DTO) mapping, I utilized MapStruct. I also enabled remote debugging and collaborated with teams using JIRA, with version control managed through Git and Gerrit.

Machine learning techniques for detecting and forecasting disorders in children using pupillometry data.

- Pioneered the integration of chromatic pupillometry into diagnostic frameworks, enhancing the accuracy and sensitivity of detecting Inherited Retinal Diseases (IRD) in children.
- Developed decision-making support systems using advanced machine learning models, including SVM, BiLSTM, ANN, and LSTM, to ensure precise and tailored results for pediatric eye conditions.
- Led research that improved strategies for diagnosing and managing Inherited Retinal Diseases in young children.
- Established a robust preprocessing pipeline for pupillometric data sets to ensure optimal preparation for analysis.
- Implemented a prediction model that effectively filters out non-correlative data, retaining only relevant information for further analysis.
- Developed custom machine learning pipelines to handle noisy data, significantly improving prediction accuracy for pediatric disorders.
- Delivered precise and accurate diagnoses, contributing to significant advances in pediatric ophthalmology.
- For the implementation of various machine learning models, the project utilized Python's extensive libraries, such as TensorFlow and scikit-learn, and created a user interface using CSS and HTML.
- The project was published in the **Journal of Algebraic Statistics** **(Web of Science).**

Smart Dustbin using IoT

- Developed an IoT-based smart dustbin system to monitor fill levels and send real-time alerts to waste management services using Java for server-side processing and Arduino for hardware control.
- Utilized ultrasonic sensors to detect bin levels and Wi-Fi modules to transmit data to the cloud for centralized monitoring.
- Built a Java-based backend service to process sensor data, trigger notifications, and update a cloud database for further analysis.
- Integrated ultrasonic sensors to automatically detect when the bin is full and to initiate real-time updates.
- Developed a Java-based server to handle MQTT messages sent from Arduino and to store bin data in a MySQL database.
- Created a monitoring dashboard using Java Spring Boot for viewing bin status, scheduling waste collection, and generating reports.

Education

- **Masters in Information Studies** - Trine University (GPA: 3.8) - June 2024
- **B.Tech in Computer Science and Engineering -** Christ University, India (GPA: 8.1) - June 2022