

Ramana Koduri

Software Developer

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Aspiring Software Developer with hands-on experience in full-stack development and a solid foundation in data science and machine learning. Proficient in Java and Python, and familiar with key data science libraries like Numpy and PyTorch. Demonstrated ability to collaborate with multidisciplinary teams and stakeholders to deliver impactful solutions. Adept at utilizing tools such as Git and Docker to streamline development processes. Passionate about applying best practices in deep learning and continuous deployment to drive innovative research and development projects.

PROFESSIONAL EXPERIENCE

COGNITIVEBOTICS

**HYDERABAD, INDIA
2022**

Software Developer

- **AI Game Development:** Collaborated with psychologists to develop AI-driven games for autistic children, utilizing Python and frameworks like Flask and Django to train deep learning models and improve therapeutic outcomes.
- **Backend Development:** Established and maintained backend services using Python frameworks such as Flask and Django, ensuring robust and scalable application architecture.
- **Web Integration:** Integrated complex algorithms into webpages using React, enhancing user experience and functionality.
- **Utilized React framework** to develop and maintain high-performance and scalable applications.
- **Containerization:** Dockerized applications to streamline deployment processes, ensuring consistent environments across development, testing, and production stages.
- **Project Maintenance:** Maintained and updated existing projects, implementing new features, and resolving issues to enhance system stability and performance.
- **Cross-functional Collaboration:** Worked closely with psychologists, educators, and engineers to ensure successful deployment of AI applications, actively participating in code reviews and agile ceremonies.

WIPRO

**HYDERABAD, INDIA
2021-2022**

Analyst

- **OSI PI System Management:** Expert in creation and modification of PI points, manual data uploads, server backups, tuning parameters, and error analysis using PI SMT.
- **PI Interfaces Configuration:** Skilled in designing and configuring PI OPC DA/HDA interfaces and PI to PI interfaces.
- **Data Visualization:** Proficient in creating and editing displays in PI ProcessBook and PI Vision, and publishing for real-time monitoring.
- **Report Generation:** Experienced in generating reports, validating data, and configuring PI points using PI Builder, PI Configurator, and SMT.
- **System Installation & Configuration:** Successfully installed and configured PI Data Archive and AF servers, along with PI Interface Nodes (e.g., PI OPC DA/HDA, PI RDBMS, PI UFL, PI PerfMonitor, PI Ping).
- **High Availability (HA) Setup:** Configured PI High Availability for PI servers and interfaces ensuring continuous data flow and system reliability.
- **Asset Framework Development:** Generated PI AF to capture asset hierarchies, developed performance monitoring equations, and built business use cases using AF Analytics and Event Frames.
- **Client Tools Automation:** Automated reports with PI DataLink and created real-time monitoring displays in PI Vision for enhanced data insights.
- **Troubleshooting Expertise:** Resolved connectivity issues from control systems to interfaces and PI System, and addressed PI server, interface node, and tag health issues.
- **Service Request Handling:** Managed service requests for PI point configuration, performance evaluations, PI analysis, event frames, and PI client issues, ensuring optimal system performance.
- **Health Checks and Maintenance:** Conducted regular health checks of PI servers, supervised archive backups, and resolved related challenges to ensure system integrity and reliability.
- **Event Frame Analysis:** Performed detailed event frame analysis using PI AF, creating and modifying element templates to meet specific business needs.
- **Performance Monitoring:** Developed and implemented performance monitoring equations using AF Analytics, optimizing operational efficiency.
- **PI SDK Management:** Configured and maintained PI SDK, analyzed SDK logs, and ensured smooth operation of collective configurations.

Software Developer

- **Kiosk System Development:** Engineered a digital solution for an eye hospital to streamline patient journeys using a robust Kiosk System, enhancing the overall patient experience.
- **Payment Gateway Integration:** Successfully integrated the Razorpay payment gateway into a standalone application, facilitating secure and seamless transactions for hospital services.
- **API Development for Digital IDs:** Initiated a comprehensive API that generated patient 'Digital IDs,' seamlessly integrating with a massive EMR system housing over 1 million user records.
- **Dynamic QR Code Generation:** Developed an API that generates dynamic QR codes and links the QR code images to patient Medical Record Numbers, enabling efficient access to patient information.
- **Messaging Service API:** Designed an API for generating message services that included URLs for accessing patient digital IDs, ensuring effective communication with patients.
- **Digital Smart Card Implementation:** Developed and deployed a digital smart card solution used for follow-ups, consultations, and check-ins, improving patient management and reducing wait times.
- **System Architecture Design:** Contributed to the architectural design of the Kiosk System, ensuring scalability, security, and reliability in handling patient data and interactions.
- **Database Management:** Managed and optimized the integration of patient data with the hospital's EMR system, ensuring data integrity and efficient retrieval.
- **User Authentication:** Implemented secure user authentication protocols for the digital solution, safeguarding patient data and ensuring compliance with healthcare regulations.
- **Performance Optimization:** Enhanced the performance and responsiveness of the Kiosk System and associated APIs, resulting in faster processing times and improved user satisfaction.

TECHNICAL SKILLS

- **Programming Languages:** Python, Java
- **Frameworks & Libraries:** Spring, Spring Boot, React, Flask, FastAPI, Django, PyTest, Celery, Node.js, FastAPI, Django, PyTest,
- **Tools & Technologies:** Docker, Kubernetes, Git, GitHub, Redis, RabbitMQ, GraphQL, MongoDB, ELK, WebSocket, AMQP, TCP, HTTP, Terraform, Ansible, Scala
- **Operating Systems:** Linux, Windows
- **Cloud Platforms:** AWS, Azure, GCP
- **Large Language Model Libraries:** LangChain
- **Relational Databases:** PostgreSQL, MySQL, MS SQL Server, Oracle

LANGUAGES

- English – Full Professional Proficiency
- French – Limited Professional Proficiency
- Telugu – Native

EDUCATION

CONCORDIA UNIVERSITY
Master of Applied Computer Science in Computer Science

MONTREAL, CANADA
2022-2024

GEETHANJALI COLLEGE OF ENGINEERING AND TECHNOLOGY
Bachelor of Technology in Computer Science

HYDERABAD, INDIA
2016-2020

ADDITIONAL INFORMATION

- **Freelancer Experience:** Successfully directed and deployed applications for various clients, ensuring timely delivery and optimal performance.
- **Event Hosting:** Anchored multiple technical and formal events, demonstrating strong public speaking and organizational skills.
- **Student Coordinator:** Organized and coordinated the technical fest "Bhaswara 2k19," overseeing event planning, logistics, and participant engagement.