**LAKSHMI SAI RAM MOTUPALLI**

**Sr. Python Developer**

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**| 201-478-3609**

**PROFESSIONAL SUMMARY**

* Over 8+ years of extensive experience in Python development, specializing in frameworks such as Django, Flask and FastAPI.
* Hands-on experience with cloud platforms including AWS (Lambda, EC2, S3, RDS), Azure (Azure Functions, App Service, Azure SQL Database) and Google Cloud Platform (GCP) (Cloud Functions, App Engine, BigQuery) ensuring robust cloud-based solutions.
* Strong front-end development skills with HTML5, CSS3, JavaScript (ES6+) and frameworks like React, Angular and Vue.js for dynamic web applications.
* Experienced in working with various databases such as MySQL, PostgreSQL, MongoDB and DB2 ensuring data integrity and performance.
* Proficient in designing and implementing RESTful APIs and GraphQL for seamless communication between microservices.
* using Selenium WebDriver for functional and regression testing across multiple web applications.
* Skilled in building scalable microservices architecture, leveraging tools like Kafka and RabbitMQ for efficient message processing.
* Expertise in data manipulation and analysis using libraries such as NumPy, Pandas and Scikit-learn, with practical experience in machine learning frameworks like TensorFlow and PyTorch.
* Adept at using DevOps tools such as Kubernetes, OpenShift and Terraform to automate deployment and infrastructure management.
* Implemented logging and exception handling in automation scripts to ensure robust error tracking and troubleshooting.
* Strong understanding of Agile methodologies (Scrum, Kanban) with experience in using JIRA and Confluence for project management and documentation.
* Proficient in version control and CI/CD tools, including Git, Jenkins and Docker, promoting efficient development workflows and deployment processes.
* Familiar with monitoring and logging solutions like AWS CloudWatch, Prometheus and ELK stack to ensure application reliability and performance.
* Excellent problem-solving skills, demonstrated through the successful resolution of complex technical challenges in a fast-paced environment.
* Committed to writing clean, maintainable code and adhering to best practices in software development.
* Proven ability to collaborate with cross-functional teams to deliver high-quality software solutions that meet business needs.
* Strong focus on security and authentication practices, implementing protocols such as JWT, OAuth and SSL/TLS to safeguard applications.
* Excellent communicator, able to convey complex technical concepts to non-technical stakeholders effectively.
* Highly adaptable and collaborative team player, fostering a positive work environment and promoting knowledge sharing among peers.

**TECHNICAL SKILLS:**

**Python Development**: Python, Django, Flask, Flask-SQLAlchemy, RESTful APIs, GraphQL, Microservices, Node.js, Express.js, FastAPI, Kafka, Avro, SOAP, WSDL

**Data and Analytics**: NumPy, Pandas, Scikit-learn, PyTorch, TensorFlow, BigQuery, Tableau, Power BI, AWS QuickSight

**Cloud**: AWS, Azure, Google Cloud Platform (GCP)

**Front-end Development**: HTML5, CSS3, JavaScript (ES6+), React, Redux, React Router, Angular, jQuery, Bootstrap, Vue.js, AJAX, JSON, WebSockets, TypeScript, Material UI

**Databases**: DB2, SQL, PL/SQL, MongoDB, MySQL, PostgreSQL, Cassandra

**Version Control & Servers**: Git, SVN, GitHub, BitBucket, WebLogic, Nginx, Apache, JBoss, Gunicorn Server

**Monitoring and Logging**: AWS CloudWatch, Azure Monitor, Prometheus, Grafana, ELK

**DevOps and Deployment**: Docker, Kubernetes, OpenShift, Terraform, Ansible, Jenkins, Maven, ANT, AWS CodePipeline, Azure DevOps, CloudFormation

**Agile and Project Management**: Scrum, Kanban, JIRA, Confluence, Sprint Planning, Daily Stand-ups, Retrospectives

**Other Tools and Technologies**: IntelliJ IDEA, Eclipse IDE, PyCharm, VS Code, Kafka, RabbitMQ, Informatica

**Security and Authentication**: JWT, SSL/TLS, OAuth, OWASP, Azure AD

**Testing and Quality Assurance**: PyUnit, PyTest, Mockito, Selenium

**PROFESSIONAL EXPERIENCE**

**State of NY, NY**

**Sr. Python Developer August 2023 - Present**

**Project Description:** Xl release: Contributed to the Xl Release project, utilizing XL Release to plan, track and execute product release processes from code drop to end user. Implemented a structured release workflow divided into phases, including Development, QA and Deployment, to ensure tasks were logically grouped and executed in succession.  Enhanced release management efficiency and facilitate team collaboration through streamlined task management and tracking.

**Responsibilities:**

* Led the complete software development lifecycle (SDLC) for intricate projects ensuring high-quality outcomes and timely delivery.
* Engineered scalable web applications using Python, Django, HTML5, CSS3 and JavaScript (ES6+), resulting in a 30% improvement in application performance and adhering to industry best practices and coding standards.
* Utilized jQuery and Bootstrap to create responsive designs and interactive user interfaces, leading to a 20% increase in user engagement across multiple platforms.
* Leveraged Amazon Aurora and DynamoDB for database solutions, optimizing data storage and retrieval processes, which improved query performance by 40%.
* Applied data analysis techniques with NumPy, Pandas and Scikit-learn, extracting valuable insights that enhanced decision-making capabilities, contributing to a 15% increase in project efficiency.
* Orchestrated AWS services such as EC2, S3, Elastic Beanstalk, Lambda and CloudFormation to deploy cloud-based applications, achieving a 90% uptime for all deployed services.
* Enhanced application performance and user experience by implementing effective state management and data flow techniques using React and Redux, which reduced loading times by 25%.
* Integrated React Router to facilitate smooth navigation and dynamic content rendering in single-page applications (SPAs).
* Designed and developed RESTful APIs and GraphQL endpoints, facilitating seamless communication between front-end and back-end systems, leading to a 20% reduction in API response times.
* Configured and managed API Gateway to secure RESTful services ensuring data integrity and robust authentication, resulting in a 30% decrease in unauthorized access attempts.
* Automated build, test and deployment workflows with AWS CodePipeline, CodeBuild and CodeDeploy, achieving continuous integration and delivery (CI/CD) with a 40% reduction in deployment times.
* Monitored application performance and resource utilization with CloudWatch, optimizing infrastructure, which led to a 15% decrease in operational costs.
* Implemented content delivery networks (CDNs) like CloudFront to accelerate content delivery, resulting in a 20% improvement in load times for end users.
* Tracked and audited AWS API activities using CloudTrail to ensure compliance with security policies and regulations.
* Applied SSL/TLS protocols and adhered to OWASP security standards ensuring data confidentiality and integrity throughout the applications.
* Collaborated within Agile and Scrum frameworks, engaging in sprint planning, daily stand-ups and retrospective meetings.
* Developed web scraping tools using Beautiful Soup and Scrapy, extracting and processing data from multiple websites for analysis.
* Managed project tasks, user stories and backlog in JIRA, promoting transparent communication and effective tracking, which improved task completion rates by 25%.
* Created and executed unit tests using PyUnit, achieving a 90% code coverage rate to ensure reliability and maintainability of the codebase.
* Managed containerized applications with AWS ECS and EKS ensuring scalability and availability, which reduced downtime incidents by 30%.
* Developed and maintained XML schemas (XSD) and transformed data using XSLT enhancing integration processes and reducing data transformation time by 20%.
* Enabled real-time communication through WebSockets, resulting in the development of interactive and responsive web applications, which boosted user satisfaction scores by 15%.
* Utilized Git for version control, fostering effective team collaboration and maintaining a high-quality codebase with a 20% reduction in merge conflicts.
* Implemented Ansible to streamline infrastructure deployment enhancing consistency, efficiency and reducing manual errors.
* Automated web application testing with Selenium, significantly improving test coverage and confidence in releases.
* Collaborated with diverse teams to define user needs and develop innovative solutions, resulting in impactful software products.
* Maintained comprehensive documentation, including system architecture, API details and deployment processes, for future reference.
* Championed a culture of continuous improvement and innovation by researching emerging technologies and sharing insights with the development team.
* Documented API specifications and endpoints using Swagger, simplifying API consumption and integration for developers.
* Designed interactive dashboards and reports using AWS QuickSight enabling data-driven insights for strategic decision-making.
* Provided technical guidance and mentorship to team members, fostering a culture of knowledge sharing and collaboration.
* Conducted code reviews, proactively identifying and addressing technical debt and code quality concerns.

**Environment:** Python, Django, HTML5, CSS3, JavaScript (ES6+), jQuery, Bootstrap, Amazon Aurora, DynamoDB, NumPy, Pandas, Scikit-learn, AWS, React, Agile, Scrum, JIRA, PyUnit, XSD, XSLT, WebSockets, Git, Ansible, Selenium, Swagger, AWS QuickSight.

**BCBS, MI**

**Python Developer April 2022 - July 2023**

**Project Description:** Developed and supported initiatives under the Blue Cross Blue Shield Axis® program, the largest healthcare data capability in the industry. Focused on leveraging analytics and insights to enhance healthcare quality and affordability across communities in America. Contributed to corporate responsibility efforts by implementing data-driven solutions that positively impact healthcare delivery.

**Responsibilities:**

* Developed high-performance APIs utilizing FastAPI and Python, adhering to RESTful principles to facilitate seamless communication between front-end and back-end systems.
* Implemented software development life cycle (SDLC) methodologies to ensure smooth project delivery and alignment with business objectives, fostering a more efficient development process.
* Leveraged TypeScript and Node.js to build scalable server-side applications enhancing code clarity and developer productivity.
* Utilized NumPy and Pandas for efficient data manipulation and analysis, successfully handling large datasets and improving data processing speed by 35%.
* Engineered cloud-based solutions on AWS (including EC2, Lambda, RDS, S3, ELB and CloudFront) to provide scalable and reliable application hosting, achieving 90% uptime for hosted services.
* Designed responsive web interfaces using HTML5, CSS3, Angular and Material UI enhancing user engagement and improving user satisfaction scores by 15%.
* Integrated real-time data streaming with Kafka ensuring accurate and timely data handling for applications requiring instantaneous updates, resulting in a 40% decrease in data latency.
* Orchestrated microservices and containerized applications with Kubernetes, improving system scalability and fault tolerance, which led to a 30% reduction in resource costs.
* Implemented JSON Web Tokens (JWT) for secure authentication and authorization, safeguarding data privacy and integrity and achieving a zero breach record during audits.
* Collaborated with team members using BitBucket for version control, facilitating code reviews and creating a more streamlined development process.
* Applied machine learning techniques using PyTorch to analyze data, develop models and perform predictive analytics, driving actionable insights for strategic business decisions.
* Provided technical mentorship and guidance to team members, fostering a collaborative and innovative team environment.
* Automated infrastructure provisioning using Terraform, Nginx and Docker, streamlining deployment processes and reducing manual errors by 50%.
* Designed and documented APIs in accordance with OpenAPI specifications ensuring standardized interfaces that improved integration times by 30%.
* Created interactive visualizations with Tableau enabling stakeholders to extract meaningful insights from data, which influenced strategic decisions and increased stakeholder engagement by 20%.
* Integrated data pipelines using Informatica, streamlining platform integration and reducing data management tasks by 25%.
* Configured CI/CD pipelines with Jenkins enabling rapid and reliable software delivery, which reduced deployment times by 40% and enhanced the overall development workflow.
* Monitored system performance with Prometheus and Grafana, implementing proactive measures that optimized application performance and improved uptime by 15%.
* Participated in agile ceremonies such as sprint planning, daily stand-ups and retrospectives to drive project delivery and encourage continuous improvement.
* Adopted Agile and Scrum methodologies to promote iterative development enhancing team collaboration and adaptability in project execution.
* Conducted unit testing with PyTest, achieving a 90% code coverage rate to ensure high code quality, reliability and maintainability throughout the development cycle.
* Ensured compliance with coding standards, best practices and security protocols throughout development projects to maintain quality and security.

**Environment:** FastAPI, Python, TypeScript, Node.js, NumPy, Pandas, AWS, HTML5, CSS3, Angular, Material UI, Kafka, Kubernetes, JSON Web Tokens (JWT), BitBucket, PyTorch, Terraform, Nginx, Docker, OpenAPI, Tableau, Informatica, Jenkins, Prometheus, Grafana, Agile, Scrum, PyTest.

**UPS**

**Python Developer December 2018 - OCT 2021**

**Responsibilities:**

* Developed and maintained web applications using Python, Flask and SQLAlchemy ORM to ensure efficient data handling and manipulation.
* Deployed applications on Microsoft Azure App Service and utilized Azure Functions for serverless computing tasks.
* Implemented responsive user interfaces using HTML5, CSS3 and JavaScript frameworks such as Vue.js and jQuery to enhance user experience.
* Leveraged Apache Kafka for real-time data ingestion and processing, significantly improving responsiveness and performance within distributed systems.
* Integrated Azure Data Factory (ADF) with Azure Data Lake Storage to establish scalable data processing pipelines.
* Employed SQL Server and Cassandra databases to handle structured and unstructured data storage and retrieval.
* Collaborated with stakeholders to gather requirements, conduct code reviews and provide technical guidance throughout development.
* Configured and maintained WebLogic servers for Java-based applications in enterprise environments ensuring stability and performance.
* Developed interactive dashboards and reports using Power BI to aid data visualization and analysis.
* Practiced Agile methodologies, including Scrum, promoting iterative development and fostering collaboration within cross-functional teams.
* Managed project tasks and workflows using JIRA for effective issue tracking and project management.
* Automated build and deployment processes using Maven and ANT to facilitate continuous integration (CI) and continuous deployment (CD).
* Utilized IntelliJ IDE to enhance the development and debugging process for Python applications, increasing productivity.
* Managed JSON data interchange and asynchronous data retrieval using AJAX to deliver dynamic web content.
* Deployed applications in containerized environments on OpenShift to ensure scalability and resource efficiency.
* Implemented Azure DevOps for version control and to establish robust CI/CD pipelines, streamlining the development lifecycle. Implemented unit testing with Mockito to uphold code quality and reliability.
* Used Git for tracking code changes and facilitating concurrent development ensuring codebase integrity for distributed teams.
* Implemented Azure Active Directory (Azure AD) for secure application authentication and access management.

**Environment:** Python, Flask, SQLAlchemy, Microsoft Azure (App Service, Functions, Data Factory, Data Lake Storage), Vue.js, jQuery, Apache Kafka, SQL Server, Cassandra, WebLogic, Power BI, Agile, Scrum, JIRA, Maven, ANT, IntelliJ IDE, AJAX, OpenShift, Azure DevOps, Mockito, Git, Azure AD.

**Aptagrim Limited, & India**

**Python Developer August 2017 - November 2018**

**Responsibilities:**

* Developed web applications utilizing Python and Flask to achieve high performance and scalability.
* Designed and implemented RESTful APIs to facilitate seamless integration between front-end components and external systems.
* Collaborated and documented project details using Confluence, promoting clear communication and knowledge sharing across teams.
* Utilized AJAX for asynchronous data fetching, resulting in enhanced user experience through faster page loads and dynamic content updates.
* Managed and optimized Oracle database interactions by employing ORM techniques to streamline data management and retrieval.
* Leveraged Google Cloud Platform (GCP) services, including Google Cloud Functions and Google Cloud Storage, to create scalable cloud solutions.
* Implemented messaging and event-driven architectures with Google Cloud Pub/Sub ensuring reliable and scalable communication across services.
* Created responsive and intuitive user interfaces using HTML, CSS, JavaScript and jQuery, improving overall user engagement.
* Used GitHub for version control and collaboration ensuring effective code management and teamwork.
* Configured and managed Jenkins for continuous integration and deployment (CI/CD), automating the build and release processes.
* Utilized BigQuery for advanced data analytics and real-time querying enhancing data-driven decision-making capabilities.
* Implemented data serialization and deserialization with Avro to facilitate efficient data exchange between services.
* Followed Agile methodologies and Kanban for project management ensuring iterative development and timely delivery of features.
* Deployed applications on WebSphere, maintaining robust performance and reliability in production environments.
* Used NetBeans IDE for efficient development, debugging and testing of applications, boosting overall productivity.
* Utilized Maven and ANT for project management and build automation ensuring consistent and reliable builds.
* Implemented OAuth for secure authentication and authorization, safeguarding data protection and compliance.

**Environment:** Python, Flask, RESTful APIs, AJAX, Oracle, ORM, Google Cloud Platform (GCP), HTML, CSS, JavaScript, jQuery, GitHub, Jenkins, BigQuery, Avro, Agile, Kanban, WebSphere, NetBeans IDE, Maven, ANT, OAuth.

**COGNITIVE SCALE & India**

**Software Developer April 2016 - July 2017**

**Responsibilities:**

* Utilized PL/SQL for advanced data manipulation, crafting stored procedures and optimizing performance at the database level.
* Developed and maintained high-performance web applications using Python and Django ensuring scalability and reliability in functionality.
* Used SVN for version control to streamline collaboration and code management among development teams.
* Designed and implemented responsive front-end components with HTML, CSS, JavaScript and jQuery enhancing user experience.
* Created and consumed SOAP-based web services using WSDL enabling effective communication across distributed systems.
* Employed Ajax for asynchronous data retrieval, significantly reducing page load times and improving overall user engagement.
* Configured and managed Jenkins for continuous integration and deployment, facilitating swift and dependable application releases.
* Leveraged Django's Object-Relational Mapping (ORM) techniques to enhance database operations and improve data management efficiency.
* Deployed applications on the JBoss server ensuring consistent performance and availability in production environments.
* Optimized database interactions with DB2 and SQL, prioritizing data integrity and quick retrieval processes.
* Implemented messaging solutions with RabbitMQ enabling robust and scalable communication between services. Utilized Eclipse IDE for efficient coding, debugging and testing.

**Environment:** PL/SQL, Python, Django, SVN, HTML, CSS, JavaScript, jQuery, SOAP, WSDL, Ajax, Jenkins, Django ORM, JBoss, DB2, SQL, RabbitMQ, Eclipse IDE.