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SUMMARY

- 4+ years of experience in **software engineering**, specializing in designing and building **scalable distributed systems** and **high-performance data pipelines**.
- Proficient in **backend development** using **Java**, **Python**, and **Scala**, with expertise in **microservices architecture** and **cloud-native applications**.
- Strong experience with **Big Data** and **event-driven architectures** using tools like **Kafka**, **Apache Spark** (**Scala/PySpark**), and **Spark Streaming** for real-time and batch data processing.
- Skilled in **cloud development** on **Google Cloud Platform (GCP)** and **AWS**, including deploying, scaling, and monitoring **microservices** and **data pipelines** in cloud-native environments.
- Hands-on **front-end development** experience with **React.js** and **TypeScript**, building dynamic, responsive UIs and integrating with backend services via REST/GraphQL APIs.
- In-depth understanding of **Test-Driven Development (TDD)** and **Extreme Programming (XP)** practices, including **pair programming** and **test-first development**.
- Experienced with **CI/CD pipelines** using **Jenkins**, **GitHub Actions**, and **Terraform** for infrastructure as code, automating deployment and scaling workflows.
- Proficient in both **SQL** and **NoSQL databases** (**PostgreSQL**, **MySQL**, **MongoDB**, **DynamoDB**) for optimized data storage, querying, and analytics.
- Expertise in **RESTful API** development using **Spring/Spring Boot**, focusing on secure, scalable, and high-performance services.
- Adept at **Agile methodologies** (Scrum, Kanban), actively participating in all phases of the **Software Development Life Cycle (SDLC)**.
- **Strong** collaboration skills**, working cross-functionally with** product managers**, UI/UX designers**, and** engineering teams **to deliver user-centric and scalable solutions.**

SKILLS

- Front-End: HTML5, CSS3, JavaScript (ES6+), TypeScript, React.js, Angular, Redux, Tailwind CSS, Bootstrap
- Back-End: Node.js, Express.js, ASP.NET Core (C#), Java, Python (Django/Flask), RESTful APIs, GraphQL, WebSockets, SignalR
- Databases: SQL Server, Azure SQL, PostgreSQL, MySQL, MongoDB, DynamoDB, Redis
- Cloud Platforms: Microsoft Azure (Azure Functions, Azure DevOps, Azure SQL), AWS (EC2, S3, Lambda), Google Cloud Platform (GCP)
- DevOps & CI/CD: Jenkins, Azure DevOps, GitHub Actions, Docker, Kubernetes, Terraform, Nginx
- Data Engineering & Analytics: Apache Spark (PySpark/Scala), Kafka, SSIS, SSRS, ETL/ELT pipelines, D3.js, Chart.js
- AI/ML Integration: TensorFlow, PyTorch, Scikit-learn, Azure Machine Learning
- Testing & Monitoring: Jest, Mocha, Cypress, Postman, Azure Monitor, Application Insights, Prometheus, Grafana
- Security & Compliance: OAuth 2.0, JWT, RBAC, SSL/TLS, HIPAA compliance, Data Encryption, Data Governance
- Tools & Methodologies: Git, GitHub, Bitbucket, Jira, Agile/Scrum, TDD/BDD

EXPERIENCE

Software Engineer | Graduate Assistant | Cleveland State University, OH | August 2023 – December 2024

- Mentored graduate and undergraduate students in Full-Stack Web Development, focusing on front-end frameworks, back-end development, API integration, and database management.
- Designed and implemented hands-on labs on web application development using Java, JavaScript (React.js/Node.js), and Python (Django/Flask), covering end-to-end application architecture.
- Built and optimized full-stack applications with modern frameworks like React.js, Express.js, and Spring Boot, ensuring scalability and responsiveness.
- Led workshops on CI/CD pipelines using Jenkins, GitHub Actions, Docker, and Kubernetes for seamless deployment of web applications to AWS and GCP.
- Guided students in building and deploying RESTful APIs and GraphQL services, focusing on authentication (JWT, OAuth 2.0), authorization, and secure data handling.
- Integrated real-time functionalities using WebSockets and Kafka for live updates and event-driven architectures in web applications.
- Conducted sessions on SQL and NoSQL databases (PostgreSQL, MySQL, MongoDB, DynamoDB), covering schema design, query optimization, and data modelling for scalable apps.
- Taught best practices in responsive design (using Tailwind CSS, Bootstrap) and state management (Redux, Context API) to build intuitive and dynamic user interfaces.
- Provided instruction on performance optimization techniques for both front-end and back-end, including lazy loading, code splitting, and database indexing.
- Mentored students on implementing monitoring and logging (Prometheus, Grafana, ELK stack) for web applications to ensure high availability and fault tolerance.
- Contributed to collaborative projects integrating AI/ML models into full-stack applications using TensorFlow.js and PyTorch, enabling intelligent features and predictive analytics.

Data Catalog Engineer | Amazon | Chennai, India | June 2021 – December 2022

- Developed and optimized full-stack web applications to manage and enhance large-scale structured product data, improving data accuracy, consistency, and discoverability.
- Built interactive dashboards using React.js and D3.js for real-time monitoring of data pipelines, enabling teams to visualize product catalog performance and data quality metrics.
- Designed and implemented RESTful APIs using Python (Flask/Django) and Node.js (Express) for efficient data retrieval, updates, and integration with internal tools.

- Automated data ingestion and catalog updates by developing Python scripts, integrating them into scalable ETL pipelines and improving system efficiency.
- Conducted data quality audits and validation using SQL and Python, integrating results into front-end tools to provide real-time feedback on data integrity.
- Optimized database performance for large-scale product data using PostgreSQL and MongoDB, ensuring quick response times for both internal and external data requests.
- Implemented CI/CD pipelines with Jenkins and GitHub Actions to automate deployment processes, improving release cycles and ensuring high availability.
- Enhanced product search and recommendation features by collaborating with data scientists to integrate AI/ML models into the platform using TensorFlow and scikit-learn.
- Strengthened data governance and security by implementing authentication (OAuth 2.0, JWT) and role-based access controls within web applications.
- Improved cross-functional collaboration by developing internal tools that facilitated communication between sellers, account managers, and engineering teams.
- Utilized Agile methodologies, participating in daily stand-ups, sprint planning, and retrospectives to ensure continuous delivery of high-quality features.

Software Engineer | Cigna Health Care | May 2018 – May 2021
- Designed and developed **scalable full-stack applications** for healthcare portals and claims processing, ensuring **high availability**, **fault tolerance**, and optimized data workflows.
- Built interactive **front-end interfaces** using **React.js** and **Angular**, focusing on user experience, accessibility (WCAG compliance), and responsive design.
- Developed and maintained **RESTful APIs** and **GraphQL** services using **ASP.NET Core (C#)**, enabling secure and efficient data exchange across systems.
- Engineered real-time features like appointment tracking and claims status updates using **WebSockets** and **SignalR**, improving user engagement and experience.
- Optimized **SQL Server** and **Azure SQL** databases with indexing, query tuning, and stored procedures, improving system performance and reducing query latency by **25%**.
- Integrated **NoSQL databases** like **MongoDB** for managing unstructured healthcare data, enabling flexible and scalable real-time analytics.
- Implemented data visualization features with **SSRS** and custom dashboards using **D3.js** and **Chart.js** to provide dynamic insights into healthcare data.
- Deployed cloud-based applications on **Microsoft Azure**, leveraging services like **Azure Functions**, **Azure Machine Learning**, and **Blob Storage** for scalable data processing and predictive analytics.
- Ensured application security and compliance with healthcare regulations (**HIPAA**) by implementing **RBAC**, **SSL/TLS encryption**, **OAuth 2.0**, and **audit mechanisms**.
- Established **CI/CD pipelines** using **Azure DevOps** and **Jenkins** for automated testing, builds, and deployments, reducing release cycles and improving reliability.
- Monitored application health and performance using **Azure Monitor** and **Application Insights**, enabling proactive issue resolution and system scalability.
- Collaborated with cross-functional teams in an **Agile** environment to deliver high-quality, data-driven healthcare solutions, focusing on user needs and industry standards.
- Integrated **AI/ML models** using **TensorFlow** and **PyTorch** into web applications for predictive analytics, enhancing patient care recommendations and risk assessments.

EDUCATION
Master's in Computer Science | Cleveland State University, OH
Machine Learning, Large Language Models (LLMs), Agile Development, System Design, Distributed Systems, Advanced Database Systems, Cloud Computing, and Big Data Analytics.
Bachelor's in Computer Science | JNTUH, Hyderabad, India
Data Structures and Algorithms, Network-Based Application Development, Cloud Computing, Operating Systems, Web Technologies, and Database Management Systems.

CERTIFICATIONS AND ACHIEVEMENTS
- **AWS Certified Developer – Associate** *(Cloud, Serverless, and CI/CD Deployment)*
- **Certified Kubernetes Administrator (CKA)** *(Container Orchestration, DevOps, and Cloud Scalability)*
- **Microsoft Certified: Azure Developer Associate** *(Cloud Application Development and Deployment)*
- **Google Cloud Professional Cloud Developer (Recommended for broader cloud expertise)**
- **Oracle Cloud Infrastructure AI Foundations Associate (1Z0-1122-23)** *(AI, ML, and Cloud Integration)*
- **GitHub Advanced Security Certification (Recommended for platform security expertise)**
- **React and Front-End Web Development Certificate** *(Modern Web App Development, UI/UX Best Practices)*
- **Advanced SQL Certification by Oracle** *(Database Optimization, Query Performance, and NoSQL/SQL Integrations)*
- **Professional Scrum Master I (PSM I)** *(Agile Development, Scrum Framework, and Software Lifecycle Management)*
- **Terraform Associate Certification (Recommended for Infrastructure as Code expertise)**