Sahasraditya Thyadi

Software Engineer — Full-Stack Developer — Cloud Applications — Python — React — GCP
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Education

University of Colorado,Boulder Boulder,CO
Master of Science, Computer Science — GPA:4.0 *May 2026*
Relevant Coursework: Datacenter Scale Computing,Design and Analysis of Algorithms

MS Ramaiah Institute of Technology Bengaluru,India
Bachelor of Engineering, Electronics and communication — GPA:8.2 *May 2022*
Relevant Coursework: Data Structures and Algorithms,Machine Learning,Cryptography, Network and Cyber Security

Technical Skills

Languages: Python, JavaScript, SQL, R
Frameworks and Tools: React.js, Express, Flask, LangChain, PostgreSQL, Redis, Kubernetes, Git, Node.js, Next.js
Cloud and DevOps: Google Cloud Platform (BigQuery, Cloud Run, Compute Engine, Pub/Sub), Azure (DP-900), Docker, Google Cloud Build, GitHub Actions
Testing & CI/CD: PyTest, JUnit, Cloud Build, GitHub Actions
Others: Apache Spark, Tableau, REST APIs

Experience

Analyst | Python, R, GCP June 2022 – July 2024
Merkle *Bengaluru, India*
- Built and deployed cloud-based data pipelines on Google Cloud Platform, using BigQuery for data warehousing and Cloud Scheduler to automate monthly refresh jobs.
- Wrote server-side scripts in R and Python to automate dashboard data processing, reducing manual effort from 3 days to 4 hours and improving scalability.
- Developed an end-to-end system that combined GCP data workflows with Tableau, enabling automated, up-to-date dashboards used across teams.
- Created scalable KPIs for vendor comparison at the SKU and category level, helping product managers quickly identify the top 10% of performers.

Trainee Intern| Python Sep. 2021 – Oct. 2021
Bharat Electronics Ltd. *Bengaluru, India*
- Collaborated with team members to conceptualize and construct a Gender Recognition and Diarization Model. Utilized a blend of Speech Signal Processing and Natural Language Processing techniques to accurately detect speakers' genders from speech inputs.
- Trained a Random Forest Classifier on 11,000 speakers across Hindi, English, and Chinese, achieving 90 percent accuracy in gender identification. Extended model capability to Japanese and Arabic speakers.

Projects

Cine-Stellation | *Next.js, Flask, Python, React.js* Aug 2024
- Developed a full-stack movie recommendation system using collaborative filtering and graph embeddings, enabling real-time search over 1000 titles.
- Engineered a performant canvas UI with D3 and force-directed layouts, supporting zoom, pan, and genre-based clustering.
- Implemented a feature to search for over 1000 movies based on storyline using Machine Learning Methods.

News Recommendation System | *Kotlin, GCP, CI/CD* Nov 2024
- Architected a microservices-based backend in Kotlin with user auth, preference-based filtering, and scalable REST endpoints.
- Deployed services on Google Cloud Run, integrated Cloud SQL for persistence and Pub/Sub for async communication.
- Configured CI/CD with GitHub Actions and Cloud Build, reducing deployment time by 60%.

Text2Comic | *Flask, Next.js, Kubernetes, GCP* Nov 2024
- Built a cloud-native app converting narrative text into comic panels using GPT-3.5 and Stable Diffusion APIs.
- Deployed containerized backend with Kubernetes and integrated GCP services for messaging (Pub/Sub), caching (Redis), and storage (GCS).
- Optimized concurrency and load balancing, supporting simultaneous requests with 99.9% uptime.