Priyanka Birajdar

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EDUCATION

San Diego State University, San Diego, CA | Master of Science in Computer Science | GPA: 3.7/4. ***Aug 2022 – May 2024***

University of Pune, India | B.E, Information Technology | GPA: 3.92/4.0 ***June 2015 – May 2019***

PROFESSIONAL EXPERIENCE

C3.AI | Software Engineer II | ***Redwood City, California, USA.*** ***June 2024 – Present***

- Served as **Forward Deployed Engineer** owning the customer account end-to-end-working directly with plant managers, and stakeholders to **architect system integrations** considering operation workflows and drive full cycle delivery.
- Designed and built a large-scale Production Schedule Optimization application used by 200+ Cargill facilities, delivering a high-performance React/Redux UI with data driven workflows.
- Implemented **Python-based data ingestion pipelines** & REST APIs to extract, transform and synchronize production, inventory & order data between SAP and C3.ai's type system, ensuring accurate, reliable & timely data flows powering the optimization engine.
- Integrated the **Gurobi optimization engine** into backend microservices, formulating constraint-based models; optimized compute performance with efficient data preprocessing and asynchronous execution to deliver near real-time production schedules across facilities.
- Developed an internal C3.ai Hackathon project: an **LLM powered Batch Job Optimizer** using LangChain, LangGraph, OpenAI & MCP servers to autonomously analyze batch job logs, generate code fixes and create GitHub PRs.
- Created a multi-agent workflow with a **RAG pipeline** over historical job metadata, reducing-batch job debugging and tuning time by 70% through automated performance recommendations.

TESLA Inc | Software Engineer Intern | ***Fremont, California, USA*** ***Jan 2024 – May 2024***

- Developed real-time network traffic infrastructure inventory dashboard for CDN & F5 Load Balancers utilizing react/redux, graphql & python fastApis enabling comprehensive visibility into node health status & essential system metrics retrieved from Prometheus node exporter.
- Automated the provisioning of new Varnish nodes in NetBox and applied tagging conventions to existing CDN nodes using a python-based NetBox tagging service, streamlining node management operations.
- Configured and deployed Varnish CDN reverse proxies on virtual machines, ensuring seamless connectivity with upstream backend servers for optimized cache content delivery.

VIASAT Inc | Software Engineer Intern | ***Carlsbad, California, USA*** ***May 2023 – Aug 2023***

- Developed robust automation scripts in Golang to effectively retrieve metrics from PagerDuty RESTful APIs, implemented authentication, error handling capabilities along with database integration.
- Implemented CI/CD scripts in Drone and set up Docker for running EC2 instances ensuring seamless integration of the scripts with the infrastructure leading to automated deployment processes.
- Created a comprehensive dashboard for the collected data in Grafana and incorporated this visualization to provide valuable insights and facilitate data-driven decision-making.

JOHN DEERE | Senior Software Engineer | ***Pune, India*** ***June 2019 – July 2022***

- Engineered the backend architecture across 3 Spring Boot microservices implementing core logic to validate job payloads, process geospatial field data & generate job definitions stored in PostgreSQL.
- Built a responsive, data-driven farm management system UI using React/Redux, enabling farmers to create, visualize, and manage field operations with real-time job status updates and seamless interaction flows.
- Implemented the end-to-end job delivery pipeline using REST, Kafka, and MQTT—generating machine-readable ISOXML task files, routing jobs through the Machine Communication Gateway (MCG), and enabling real-time feedback from the connected equipment.
- Improved system observability by integrating Prometheus, Grafana, and Elasticsearch to monitor API latency, dispatch rates, telemetry ingestion, and cross-service traceability.
- Participated in the **John Deere Global Hackathon 2021**, implementing front-end and workflow improvements to the Work Planner tool that enhanced usability, data flow, and task planning efficiency.
- Set up CI/CD pipelines using Drone and Jenkins to enable faster continuous deployments, and designed automated end-to-end regression test suites with Cypress to ensure release reliability.

CERTIFICATIONS

AWS Certified Solutions Architect – Associate

Certified Kubernetes Application Developer (Certificate No: LF-u9217zxta 1)

TECHNOLOGY STACK

AI & LLMs: LangChain, LangGraph, multi-agent workflows, RAG pipelines, vector databases (Chroma DB, Pinecone), MCP servers, LangSmith.

Languages: JavaScript, Java, TypeScript, Python, C++

Web Technologies & Frameworks: React.js, Redux, Node.js, Angular.js, webpack, babel, ECMAScript, CSS3

Software Technologies & Databases: REST APIs, F5 Load Balancers, NetBox, Varnish CDN, AWS, Mocha, Jest, Junit, Jango, Spring Boot, Docker, Drone, Jenkins, Cypress, Grafana, Prometheus, My-SQL, MongoDB, PostgreSQL