Sahith Jalapally

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SUMMARY

Software engineer with **4+ years of experience**, passionate about building **scalable, reliable systems** that handle high-volume workloads and complex workflows. Skilled in **developing scalable applications, APIs, and cloud infrastructure**, with a track record of **designing efficient systems, reducing latency, optimizing workflows, cutting costs, and improving reliability**. I thrive at solving **complex technical challenges** and delivering **robust, user-focused software** that drives measurable business impact.

SKILLS

Programming Languages & Frameworks: C#, Java, Python, TypeScript, JavaScript, DotNet MVC, Spring MVC, NodeJS, ExpressJS, Entity, Solidity,
Frontend Development: React, Angular, Svelte, NextJS
Backend & API Development: RESTful APIs, GraphQL, JWT, API Versioning, WebSockets , Serverless Functions, Kafka
Data & Infra : PostgreSQL, MySQL, MongoDB, Cosmos DB, NoSQL Design, Redis / In-Memory Databases, Caching Strategies.
Cloud Platform & DevOps: Azure PaaS, AWS(Enclaves, S3, EC2,Lambda) , Docker, Kubernetes, Terraform , Git, CI/CD, Azure DevOps
API & System Design: Service-Oriented Architecture, Event-Driven Design,Decentralized Systems, Microservices, Distributed Systems
Practices: Jira, Agile (Scrum, Kanban), Software Development Methodologies, Code reviews
Computer Science Fundamentals: Algorithms, Data Structures

EXPERIENCE

Software Developer (Java, Python) - Full Time Co-op | RA

Xlab **August 2024 - Present, Ohio, USA**

- **LER:** Led a **secure credential verification** platform (**React, Python, AWS Nitro Enclaves**), using **cryptographic attestations** to guarantee **100% data integrity**, **reducing** manual verification by **85%** for a **high-availability, distributed system.**
- **LER:** Developed a **vector-based skill-job matching engine** with optimized APIs using **Redis caching**, reducing latency by **72% (650ms→180ms)** and boosting ranking precision by **31%**, leveraging **databases** and **scalable backend design**.
- **HaloHarbour:** Architected **privacy-preserving** personalization (**Java, Spring MVC**) with **on-device federated learning**, retaining model accuracy while enforcing **100% user data privacy** and zero raw data exfiltration.
- **HaloHarbour:** Shipped **secure computation microservice** on **AWS** using **Nitro Enclaves** enabling verifiable third-party analytics; increased data utility by **38%** with **cryptographic attestations**, auditable logs, and **zero-trust** boundaries.
- **NIH:** Delivered **privacy-preserving GWAS** platform (**Python, Next.js**) using **encrypted per-cohort data** and **secure multi-party computation**; achieved **0 raw data exposure**, **99.9% reproducibility**, and full **HIPAA** alignment with automated provenance.

Software Developer - .Net Backend

Embrace Pet Insurance **June 2025 - August 2025, Ohio, USA**

- Replaced an **OpenAI-powered service** with a custom **C# distributed solution**, reducing monthly cloud spend by **$1,063** and cutting **API response times** by **25%** across **3 mission-critical workflows**, delivering a more **cost effective and efficient solution**.
- Architected a resilient automation tracker for a **Kafka-like** event stream with a **state tracker**, boosting data processing throughput by **28%** and efficiently managing **5K+** daily notifications in a high-volume system.
- Implemented **claims document deduplication** (**Azure Blob Storage, C#**) reducing redundant storage by **36%** and lowering processing time by **18%** on **12K+ monthly uploads**, optimizing storage efficiency.
- Partnered with **Product/Engineering** to map **cross-team dependencies**; achieved **100% feature clarity** per sprint, cutting mid-sprint churn by **20%** and unblocking delivery paths.
- Championed **automated testing** and **CI**; raised coverage **65%→96%**, reduced **QA turnaround by 30%**, and prevented regressions with **pre-merge gates** and ephemeral test environments.

Software Developer - .Net Full Stack

Accenture Solutions Private Limited **August 2021 - December 2023**

- Reduced **API latency by 34%** for high-volume **hotel bookings system** by building and refactoring **.NET microservices** and adding **Azure Cognitive Search** for a **1M+ records Cosmos DB,** improved **p95** responsiveness under load.
- Scaled **core bookings** services to handle **2 x peak traffic (1.2M req/day)** via **strategic caching**, connection pooling, and **concurrency tuning**; delivered **zero downtime** and **graceful degradation**.
- Spearheaded **database and query optimization** (Cosmos DB) using point reads, RU budgeting, and query rewrites cutting monthly infrastructure costs by **26%** while **maintaining peak scalability and performance** across internal operational systems.
- Automated **Azure** provisioning with **Terraform**; compressed deployments from **3h→20m**, standardized environments, and enabled **repeatable, error-free CI/CD**.
- Built **Azure Data Factory** pipelines for large-scale **booking data**; delivered curated datasets to **BI**, accelerating decision cycles and near-real-time reporting SLAs.

Software Developer Intern - .Net Full Stack

Cognizant Technology Solutions. **January 2021 - August 2021**

- **Developed .NET MVC portal modules** for customer transactions, enabling **24/7 self-service for 5K+ users** and reducing call center volume by **18%**.
- **Collaborated** with QA and product teams to refine **acceptance criteria**, reducing rework by **25%** and accelerating delivery by **1 week**.
- Optimized **page load workflows** by refactoring **UI logic**, reducing **initial render time from 2.8s to 1.9s** and improving **customer satisfaction**.

EDUCATION

Master of Science in Computer and Data Science

Case Western Reserve University · Cleveland, Ohio · 2025 · 4.0 GPA