Kavish Doshi

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Experience

Microsoft | New York, NY
Software Engineer II | 01/2022 - Present

- **Owned and led** the design and evolution of Azure Monitor's metrics ingestion layer, building **high-throughput, low-latency distributed systems** processing **10+ PB/day** and **100M+ requests/sec in a region**.
- Served as the **Subject Matter Expert (SME)** for metrics ingestion, leading customer escalations, mentoring engineers, and driving architectural decisions across teams.
- **Drove cross-functional execution** with engineers, product managers, and tech leads to deliver new ingestion features and platform-wide scalability improvements.
- **Led incident response** for high-severity production issues, conducting deep root-cause analysis and implementing long-term reliability, resilience, and operational excellence improvements.

Amazon | Seattle, WA
Software Engineer I | 08/2020 - 12/2021

- Refactored a legacy Java service on AWS with **configurable throughput** and **multithreaded processing**, boosting performance and scalability; increased unit test coverage from **55% to 99%**, reducing regression risk.
- Resolved a **critical system bug**, preventing large-scale failures; implemented long-term fixes, monitoring, and proactive reliability improvements while maintaining production system health.

UC Davis | Davis, CA
Student Researcher | 09/2018 - 06/2020

- Built embedded software on Raspberry Pi to concurrently acquire SpO_2, PAI, and waveform data from dual Nonin sensors, supporting machine learning and deep learning–driven analysis.
- Applied signal processing and anomaly detection techniques on respiratory waveforms to identify deviations across multiple breathing patterns.

Skills

C#, Java, Azure, AWS, Git, Node.js, Python, SQL, TensorFlow, Selenium, And More...

Education

University of California, Davis | Davis, CA
Masters in Computer Science (GPA: 3.74 / 4) | 06/2020

Vellore Institute of Technology | Vellore, India
Computer Science and Engineering (GPA: 9.05 / 10) | 05/2018

Publications

- "A Novel System to Collect Dual Pulse Oximetry Data for Critical Congenital Heart Disease Screening Research" in Journal of Clinical and Translational Science - Oct 19, 2020, as the first author.
- An Efficient Approach To Civil Structures Health Monitoring Using Fog Computing As Clusters Through 5G Network Environment" in publication description advances in Systems Science and Applications (ASSA) - Oct 1, 2018

Projects

- **Distributed Systems:** Implemented a distributed file system using the Raft consensus protocol with WebDAV-based storage in Node.js, ensuring fault tolerance and consistency.
- **Systems Integration & Observability:** Built a high-performance data extraction pipeline bridging a C++ framework with Node.js using Node-GYP and Node-API; exposed metrics and visualized system behavior through Grafana dashboards.
- **Data & Algorithms:** Developed a scalable movie recommendation engine using Matrix Factorization, processing **1M+ ratings** to predict user–item interactions efficiently.