Liam Wood

Austin, TX | (305) 790-9093 | general.lvwood@gmail.com

EXPERIENCE

Microsoft *July 2022 – Present*

Software Engineer II — Platform Infrastructure

- Own design and end-to-end reliability of distributed notification infrastructure processing **6B+ events/month** across OneDrive and SharePoint, spanning dozens of interdependent services deployed across Linux-hosted AKS clusters.
- Architected **KEDA-driven job scheduling and autoscaling** system tied to real-time queue depth and traffic patterns, reducing tail latency and eliminating over-provisioning waste ($500k–$750k annual savings).
- Led AKS migration and full **deployment and configuration management** re-architecture — redesigned infra-as-code pipelines and cluster provisioning to support safe, repeatable deployments at scale.
- Designed **multi-region failover** architecture using Azure FrontDoor and Traffic Manager; maintained **99.99% availability** under continuous global load with automated BCDR failover runbooks.
- Owned **CI/CD pipelines** (Azure DevOps, Git) and progressive rollout tooling, improving release cadence from 6-week cycles to **weekly deployments** with integrated smoke testing and automated rollback.
- Built and maintained **process state observability** systems and incident dashboards; collaborated with SRE teams to define alerting thresholds, runbooks, and on-call escalation paths.
- Collaborated with partner engineering teams worldwide to safely enable new customer-facing notification features, driving requirements through design, testing, and staged rollout.
- Promoted twice in 3 years for technical leadership across reliability engineering, cost optimization, and deployment safety.

Visa *October 2020 – July 2022*

Senior Software Engineer — Clearing & Settlement Infrastructure

- Designed and implemented **state-machine–driven settlement engine components** in Python and C++, processing **trillions in annual transaction volume** across distributed financial infrastructure with strict correctness and consistency guarantees.
- Engineered distributed systems requiring **fault-tolerant, exactly-once processing** under concurrent load; contributed to early real-time transaction observability and analysis pipelines across clearing and settlement systems.
- Built and maintained comprehensive **unit and integration test suites** for high-criticality financial infrastructure, ensuring correctness and catch-all coverage for edge cases in concurrent transaction flows.
- Operated within a strict **Linux-based production environment**; routinely diagnosed and resolved complex distributed system failures under time pressure with direct financial impact.

Digital Worlds Institute — University of Florida *August 2019 – February 2020*

Software Developer

- Sole developer for a browser-based AR/blockchain card game platform; built a **Node.js backend** with Redis pub/sub managing **100+ concurrent WebSocket connections** and real-time distributed game state synchronization.
- Designed frontend in Vue.js with native-like performance and integrated WebAR libraries, delivering a full-stack production system end-to-end.

EDUCATION

University of Florida *August 2016 – May 2020*
B.S. Computer Science

Vice President, GatorVR — led technical workshops and mentored students in VR/AR development and CS fundamentals.

SKILLS

Languages	C++, Python, C#/.NET, Node.js, JavaScript
Infrastructure	Linux (AKS/bare-metal), Kubernetes, KEDA, Azure FrontDoor, Azure DevOps, BCDR Planning
Distributed Systems	High-scale event processing, multi-region failover, fault-tolerant state machines, queue-based scheduling
SDLC & Tooling	Git, Azure DevOps CI/CD, Jenkins-equivalent pipelines, progressive rollout, integration & regression testing
Observability	Process state monitoring, alerting design, incident response, SRE collaboration