

Harsh Kumar

332-209-9652 Redmond, WA harshku5488@gmail.com [hkumar30.github.io](https://github.com/hkumar30) linkedin.com/in/hkumar30

Education

Arizona State University

May 2025

Bachelor of Science in Computer Science (GPA: 4.0)

Tempe, AZ

- Moeur Award Recipient. Dean's List for eight semesters consecutively.
- **Relevant Coursework:** Operating Systems, Distributed Software Development, Web Information Systems

Work Experience

Mindspark

Oct 2025 – Present

AI Engineer

Remote

- Engineered a zero-downtime production data migration for the Kairos Aurora PostgreSQL database (0 deltas across 18 tables) by building a read-only FDW pipeline and insert-only loaders.
- Cut transfer costs to \$0 and minimized latency through same-AZ traffic and a self-referencing SG rule; ensured data integrity via count-parity and anti-join verification suites.
- Authored the Migration Runbook and automated end-to-end deployment via CI/CD pipelines, enabling repeatable, fault-tolerant migrations and cross-team alignment under 2-hour change windows.
- Improved maintainability and security post-cutover by generating schema diffs, ERDs, and removing temporary FDW objects after validation.
- Tested and improved an AI system that creates full classroom workshops, running 16 structured evaluations that increased accuracy and reduced errors in the generated lesson materials.
- Built and refined prompts used by six different OpenAI models, raising the system's reliability to 95 percent and helping teachers get ready-to-use lesson plans with far less manual work.

Mindspark

Aug 2025 – Oct 2025

Frontend Developer

Remote

- Delivered scalable React components integrated with the existing CMS, improving user retention by 18% through SEO optimization and performance tuning.
- Integrated REST APIs on AWS Lambda into distributed front-end workflows, reducing load times by 35%.

Velocity Tech Inc.

Jan 2024 – Dec 2024

Full-Stack Engineer Intern

Remote

- Delivered ERP Contract Management System used to streamline contractor hiring pipeline.
- Automated resume parsing with Express + OpenAI API, reducing manual data entry workload by 60%.
- Built interactive React UI components with auto-fill functionality, improving contractor onboarding efficiency.
- Designed scalable PostgreSQL + Amazon S3 integration for secure document storage and retrieval.

Skills

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

Frameworks & Libraries: React, Node.js, Express, ASP.NET

Databases & Cloud: PostgreSQL, MongoDB, AWS, Firebase, Azure, Redis

Tools: Git, Docker, LaTeX, REST APIs, Microservices, CI/CD

Volunteer Experience

Section Leader

Apr 2025 – Jun 2025

Stanford University

- Led weekly 50-minute Python sessions for a 10-student cohort, sustaining 85% average attendance and achieving 60% on-time assignment submissions.
- Delivered interactive lectures and 24 one-on-one mentoring sessions, boosting engagement and mastery of core CS concepts.
- Collaborated with 1,400+ global instructors to expand equitable access to computer science for 20,000+ learners worldwide.