

Shrey Deshmukh

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Education

University of California, Irvine (UCI)

Master of Computer Science

Relevant Coursework: Algorithms, Artificial Intelligence, Advanced Programming, Machine Learning, Distributed Systems

Expected December 2026

Irvine, California

Manipal Institute of Technology (MIT)

B.Tech in Computer and Communication Engineering

Relevant Coursework: Data Structures, Object Oriented Programming, Operating Systems, Database Systems, Cloud Computing, Big Data Management, Software Design Technology

July 2019 - July 2023

Manipal, India

Professional Experience

Hewlett Packard Enterprise (HPE)

Bengaluru, India

Software / Cloud Development Engineer I

August 2023 – August 2025

Enterprise Kubernetes Storage Integration

- Built scalable backend services in **Golang** for **Kubernetes CSI** driver, supporting enterprise-scale storage provisioning, replication, and failover across multi-cluster environments.
- Designed Active Peer Persistence using custom **Kubernetes CRDs**, enabling automatic workload rescheduling during link failures and improving system availability.
- Implemented policy-driven replication and resize-on-clone workflows using **Helm** charts and **CSI StorageClasses**, improving automation of PV/PVC provisioning at scale.
- Designed and shipped a *Disable Host Deletion* safeguard, preventing accidental host removals and enforcing replication consistency across Kubernetes clusters.
- Resolved **12+ customer-critical production issues** through debugging and root cause analysis, preventing data inconsistency and unblocking enterprise customer deployments.
- Increased Golang unit test coverage from **0% to 40%**, reducing production regressions and improving release stability.

VMware vSphere Storage Management Integration

- Developed core components of the **HPE vSphere plugin** using vCenter APIs, enabling administrators to manage storage, datastores, and virtual machines directly within **VMware vCenter**.
- Engineered snapshot restore optimizations using array-level fast-copy operations, enabling near-instant VMFS datastore recovery and contributing to a **\$1.1M+** Disaster Event Recovery solution.
- Improved recovery workflows by implementing automated snapshot expiration and cleanup mechanisms.
- Implemented Active Peer Persistent datastore features allowing creation across multiple Remote Copy Groups, strengthening disaster recovery capabilities.
- Enhanced datastore and volume management by enabling expansion into unallocated capacity, improving load performance, and adding visibility for memory vVols.

Software / Cloud Development Engineering Intern

January 2023 – July 2023

Disaster Recovery Automation

- Engineered a disaster recovery automation plugin for **VMware Site Recovery Manager (SRM)**, enabling automated failover, failback, and migration workflows.
- Extended support for multiple storage platforms and modern protocols including **NVMe/FC**, increasing system compatibility.
- Improved recovery performance through concurrent execution using goroutines, accelerating disaster recovery operations.
- Built a Golang + REST CLI tool to detect and recover inconsistent storage states post-failover, improving disaster recovery reliability; ranked **Top 10** at HPE Storage Creative Days 2023.

Starbucks India (Tata Starbucks Pvt Ltd)

Mumbai, India

Summer IT Intern

June 2022 – July 2022

Starbucks India Mobile App Development

- Contributed to feature validation and release readiness for the Starbucks India Mobile App supporting a national-scale rollout.
- Conducted **QA Testing** on the application to validate software functionality, usability, and performance.
- Collaborated with engineers and executed **UAT** workflows and defect tracking, to improve post-launch stability.

Technical Skills

Programming Languages: C++, Golang, Python, Java, Bash

DevOps and Platforms: Kubernetes, Docker, Helm, Git, GitHub, Jenkins (CI/CD), Linux

Cloud and Systems: VMware ESXi, VMware vSphere

Storage and Data Management: CSI, Disaster Recovery, Distributed Storage, Replication, Snapshots

Software Methodologies: SDLC, Agile, Scrum, Jira, Confluence