

Shrey Deshmukh

Irvine, California - 92617

+1 (949) 331-5146 | sdesmu2@uci.edu | linkedin.com/in/shrey-deshmukh | github.com/Shrey-Deshmukh

Education

University of California, Irvine (UCI)

Master of Computer Science

Relevant Coursework: Algorithms, Artificial Intelligence, Advanced Programming, Machine Learning, Data Mining

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, Essentials of Management, Software Design Technology, Mobile Application Development, Big Data Management

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

- Developed features for an enterprise Container Storage Provider (CSP) using **Golang** with **Kubernetes CSI** integration, supporting provisioning, replication, and management of persistent volumes.
- Implemented resize-on-clone (RFE) and policy-based Remote Copy Group configuration, leveraging **Helm and CSI Storage classes** streamlining replication workflows.
- Engineered Active Peer Persistence with custom **Kubernetes CRDs** to track primary/secondary array states, enabling automatic workload scheduling in the event of link failures.
- Designed and documented the feature *Disable Host Deletion* safeguard, preventing accidental host removals in secondary arrays and enforcing replication consistency and failover safety across Kubernetes clusters.
- Resolved 12+ critical bugs and escalations** across customer deployments and delivered fixes ensuring stable production rollouts.
- Increased overall project **Golang unit test coverage** from 0% to 40%, fixing lint issues, improving system reliability significantly.

VMware vSphere Storage Management Integration

- Developed core components of the **HPE vSphere plugin** enabling administrators to manage storage, datastores, and VMs directly within **VMware vCenter** for improved productivity and service quality.
- Implemented Quick Restore Snapshot functionality for VMFS datastores, leveraging array-level fast-copy operations to enable near-instant restores, contributing to **~\$1.1M Disaster Event Recovery (DER) solution**.
- Built **snapshot restore optimizations** by reducing restore time and introducing expiration timers for automated cleanup.
- Delivered Peer Persistent datastore features, allowing creation on multiple Remote Copy groups, strengthening recovery.
- 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 plugin** for **VMware Site Recovery Manager (SRM)** that automated failover, fallback, and migration workflows across HPE enterprise storage systems.
- Extended support to multiple storage platforms and modern protocols such as **NVMeoFC**, broadening system compatibility.
- Enhanced plugin response time** by implementing multithreading solutions, thereby achieving faster disaster recovery.
- Designed a GoLang and **REST** based CLI tool during the **HPE Storage Creative Days 2023** hackathon to detect and recover inconsistent storage states post-failover, ranking among the **top 10 innovations**.

Starbucks India (Tata Starbucks Pvt Ltd)

Mumbai, India

IT Intern

June 2022 – July 2022

Starbucks India Mobile App Development

- Assisted in the **successful launch** of the Starbucks India Mobile App by contributing to feature development and integration.
- Conducted **QA Testing** on the application to validate software functionality, usability, and performance.
- Developed and executed **User Acceptance Testing (UAT)** cases and scripts to simulate real customer workflow.
- Reported defects to developers to ensure timely resolution, directly improving app stability and customer experience.

Technical Skills

Programming and Scripting: C++, Golang, Python, Java, Bash / Shell Scripting

Cloud and Virtualization: VMware ESXi, VMware vSphere

Storage and Data Management: CSI, CSP, Disaster Recovery, NFS, iSCSI, Fibre Channel, Replication, Snapshots

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

Development Tools: VS Code, Eclipse

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