

Shrey Deshmukh

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Education

University of California, Irvine (UCI)

Master of Computer Science

Expected December 2026

Irvine, California

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

Manipal Institute of Technology (MIT)

B.Tech in Computer and Communication Engineering

July 2019 - July 2023

Manipal, India

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

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, failback, 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