ASHAY SHIRWADKAR

3131 Watkins Drive, Riverside, CA 92507

(+1)408-341-5160 ⋄ ashayshirwadkar12@gmail.com ⋄ **LinkedIn** ⋄ **GitHub**

EDUCATION

University of California, Riverside (GPA: 4.0)   *Sept 2019 - Current*
Masters of Science, Computer Engineering.

TECHNICAL STRENGTHS

Languages: *(Proficient)* C, C++, Python, Bash, HTML, *(Familier)* SQL, Java
Platforms: AWS S3, Openstack, Docker
Versioning: Git, SVN

Operating System: *(Proficient)* Linux, Windows
Misc: Docker, NFS, Samba, REST, CUDA, Ceph, PostgreSQL

WORK EXPERIENCE (4+ YEARS)

Futurewei Technologies, Bellevue (Remote)   June 2020 – Sept 2020
Research & Engineering Intern, Cloud Data and Storage

· By implementing an in-memory indexer in C++ based on height optimized trie, I enabled a consistently high fanout. The layout of each node is carefully engineered for compactness and fast search using SIMD instructions.

Seagate Technologies, Pune   Aug 2018 – Aug 2019
Engineer II

· Designing and implementing the support for NFSv4 to Exos Object Storage (EOS) appliance, I provided a bridge between file storage and object storage.
· Designed a monitoring platform, outside my skillset, on top of EOS using Grafana and StatsD in time critial enviroment.

DDN Storage, Pune   Jan 2017 – Aug 2018
Software Engineer

· Worked on providing iSCSI Extensions for RDMA (iSER) capability to SFA i.e. block storage platform.
· Developed a new REST interface to get the information from various components of storage compliance Core.

Calsoft Inc, Pune   Jan 2015 – Jan 2017
Development Engineer

· Worked on the project Federated Cloud File System to create a translation channel that mapped the generic UNIX file-system interface to different vendor-specific cloud interfaces in C.
· Implemented on-disk cache to support local modification of objects which reduced network bandwidth usage, latency, and cloud transaction cost.

ACADEMIC PROJECTS

Weakly connected replicated storage system   2020
Distributed Systems Project

· Designed a prototype of a replicated storage system providing weakly consistent guarantees. Hand on experience in implementing an eventually consistent system in Python.

Impact of GPU's I-Buffer entries on performance   2019
GPU and Parallel Programming Course

· Modified the execution pipeline of GPU simulator (GPGPU-Sim) to fetch and buffer more instructions in I-Buffer. Analysis showed 5% to 8% performance improvement on the most commonly executed operations.