Andrew Gaul

Systems programmer interested in entrepreneurship and technical leadership opportunities in San Francisco and Tokyo. Background includes work in distributed computing, storage, and free software.

Work experience

Google Japan, Senior Software Engineer (2019 - present)

- Managed a team of seven to improve page experiences across the web ecosystem
- Technical lead for a Chrome UKM-based mobile classifier and search ranking signal
- Evaluated a search ranking signal to demote pages with excessive visual clutter and advertisements
- Received a Search tech impact award for helping reduce page load latency by 1,000 years per quarter
- Managed a team of five to allow Discover users explicit control and respond quickly to implicit interests
- Improved Apache jclouds Google Cloud integration and gcsfuse POSIX compatibility

Bounce Storage, Co-founder (2014 - 2015)

- Created a hybrid object store for managing data spanning different clouds and geographies
- Implemented protocol translator comprised of an S3 frontend and an enhanced Apache jclouds backend
- Led outbound efforts including pitching to investors, sourcing customers, and presenting at conferences

Maginatics, Staff Engineer (2013 - 2014), Senior Engineer (2011 - 2013)

- Founding engineer for MagFS 1.0-2.6, a cloud-based file system which became EMC CloudBoost
- Lead developer of object data storage, SQL metadata, deduplication, garbage collection, and snapshots
- Fixed MySQL concurrency and space-efficiency issues and contributed to upstream projects
- Worked with the Apache jclouds community to improve compatibility across 15 different object stores
- Mentored engineers, supervised contractors, and interacted with customers, investors, and partners

Riverbed Technology, Member of Technical Staff (2006 - 2011)

- File system engineer for Atlas 1.0, a deduplicating storage appliance which became NetApp AltaVault
- Implemented algorithms and data structures for efficient indexing and storage of compressed data
- Improved performance and space efficiency of data deduplication, garbage collection, and snapshots
- Provided 2-10x speedups via algorithmic improvements, assembly-level optimizations, and tuning

- Storage engineer for SteelFusion 1.0, a virtualized, WAN-optimized iSCSI storage appliance
- Contributed to core indexing structures, transactional persistence of data, and overall performance
- Established dogfood setup, deployed initial customer installs, and evangelized failure-injection testing

Free software

- Apache jclouds committer, PMC member (2013 - present), and Vice President (2016 - 2017, 2021 - present) - implemented the Backblaze B2 API and mentored Google Summer of Code students (2014, 2017)
- s3fs committer (2019 - present) - accelerated readdir, rename, and write performance by 2-5x, addressed data loss issues, and improved POSIX compatibility, S3 interoperability, testing, and documentation
- Author of Chaos HTTP Proxy, Java httpbin, JDBC lint, Modernizer Maven Plugin, S3Proxy, and x86lint
- Contributed to compy, Firefox, gcsfuse, goofys, innodb_ruby, OpenSSH, s3-tests, Thrift, and more
- Speaker at ApacheCon, Linux.conf.au, Ohio LinuxFest, and Open Source Summit

Education

University of Texas at Austin, BS Computer Sciences (1997 - 2002)

- Received an honorable mention at the 2001 ACM International Collegiate Programming Contest
- Basic Japanese language proficiency (JLPT N4, 2022)