

Andrew Gaul

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

Experience

Determined AI Senior Systems Engineer 2018 - present

- Maximizing paperclips

Consultant and Sabbatical 2016 - 2017

- Consulted for several clients on Apache jclouds, goofys, and S3Proxy and visited 17 countries across Asia and Europe

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 customer prospects, and presenting at conferences

Maginatics (acquired by EMC) Staff Engineer 2013 - 2014
Senior Engineer 2011 - 2013

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

Riverbed Technology Member of Technical Staff 2006 - 2011

Storage engineer for SteelFusion 1.0, a virtualized, WAN-optimized iSCSI storage appliance

- Contributed to core indexing structures, transactional persistence and recovery of data, and overall system performance
- Established internal dogfood setup, deployed initial customer installs, and evangelized failure-injection testing

File system engineer for Atlas 1.0, a deduplicating storage appliance which evolved into NetApp AltaVault

- Implemented algorithms for deduplication and data structures for efficient indexing and storage of compressed data
- Improved data segmentation, snapshot, and garbage collection algorithms, increasing performance and space efficiency
- Provided 2-10x speedups via algorithmic improvements, assembly-level optimizations, and implementation tuning

Device framework engineer for SteelHead 3.0-5.0, a network optimization appliance

- Technical lead for Python language bindings and modernizing CLI, supervising one junior engineer and one intern
- Redesigned BDB-based statistics subsystem, improving performance, saving space, and simplifying garbage collection
- Integrated SSL acceleration, Proxy File Service, CIFS cache warming, and encrypted configuration with system services

Tabernus (acquired by Blancco) Software Engineer 2004 - 2006

- Lead engineer for the Tabernus E800 1.0, disk refurbishing hardware designed for high-throughput requalification
- Designed and implemented Disk Purge 1.0-2.0, a bootable Linux CD for securely erasing storage devices

Education

University of Texas at Austin BS Computer Sciences 1997 - 2002

Miscellaneous

- Author of asmlint, Chaos HTTP Proxy, Java httpbin, JDBC lint, Modernizer Maven Plugin, and S3Proxy
- Apache jclouds committer & PMC member (2013 - present), Vice President (2017), and GSoC mentor (2014, 2017)
- Free software contributions: compy, goofys, H2, innodb_ruby, Percona InnoDB tools, s3fs, s3-tests, Thrift, and more
- Received an honorable mention at the 2001 ACM International Collegiate Programming Contest