

MANU GOYAL

2310 Piedmont Ave. Apt 303 Berkeley CA, 94704
manu.goyal2013@gmail.com
manugoyal.com

EXPERIENCE

Dropbox 2015

- Intern on the Dropbox for Business team
- Implemented permissions model for nested shared folders
- Re-designed the user authentication flow to support proper logging and permissions checks
- Performance improvements to critical server endpoints

Google 2014

- Intern on Dremel, a high-performance SQL query engine for web-scale data analysis
- Developed a new type of lookup join for joining a large partitioned table and a smaller table where a hash join would incur too much overhead
- Implemented a lookup table on top of Google's in-memory data store capable of high distributed read and write throughput to execute the lookup joins quickly

UC Berkeley AMPLab 2014-Present

- Working with Ion Stoica and Haoyuan Li on Tachyon, a fault tolerant distributed file system enabling reliable file sharing at memory-speed across cluster frameworks, such as Spark and MapReduce
- Implemented fine-grained caching for columnar data
- Redesigned and optimized the filesystem metadata manager

Carnegie Mellon University 2013

- Worked with Dave Andersen on libcuckoo, a high-speed, memory-efficient, hash table designed for high levels of concurrency
- Implemented a general purpose, industrial-quality version of the table in C++
- Improved the design to support concurrent expansion and concurrent writers

MemSQL 2012, 2013

- Worked on a scalable, in-memory database
 - Implemented foreign keys with referential integrity
 - Developed a tool to replicate between MySQL and MemSQL
 - Fixed dozens of bugs to stabilize the engine before the first public release
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EDUCATION

UC Berkeley 2013-2017

- Electrical Engineering and Computer Science (EECS)
 - GPA: 3.98
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SKILLS

Programming Languages

C, C++, Python, SQL, Java, Go, HTML, Javascript, CSS, Haskell, OCaml, SML, x86 Assembly, LaTeX

Software

Emacs, Vim, GDB, Git, Microsoft Office, Adobe CS

STATUS

Full time student
Citizen of United States

HONORS

National Merit Scholar
National AP Scholar