MANU GOYAL

558 Central Way A109, Kirkland, WA 98033
(415)-633-6902 manu.goyal2013@gmail.com
manugoyal.com

EXPERIENCE

Google   2014

- Software Engineering Intern working 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 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
- Redesigned and optimized the filesystem metadata manager
- Fixed numerous engine and user interface bugs

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
- Contributed to the frontend dashboard
- Developed a tool to replicate between MySQL and MemSQL
- Implemented several aggregate and builtin functions
- Fixed dozens of bugs to stabilize the engine before the first public release

EDUCATION

UC Berkeley   2013-2017

- Electrical Engineering and Computer Science (EECS)
- GPA: 3.925/4.00

SKILLS

Programming Languages
C, C++, Python, SQL, Go, HTML, Javascript, CSS, Haskell, OCaml, Java, x86 Assembly

Frameworks/Servers
MySQL, Tornado, net/http, AJAX/JSON, jQuery, Backbone.js

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

STATUS

Full time student
Citizen of United States

HONORS

National Merit Scholar
National AP Scholar
National Honor Society