Archit Mishra

github.com/armishra · linkedin.com/in/armishra97 · archit72@gmail.com

Education

2015 – 2018 **University of California, San Diego**, B.S. Computer Science, GPA – 3.80.
Expected Graduation: June 2019

Experience

Facebook **Software Engineering Intern**.
- Worked on the Database Engineering team addressing tasks related to Facebook's internal MySQL database needs
- Added system information to RocksDB and MyRocks to report transactional deadlocks under the engine's transaction status query
- Pursuing project that presents auto incrementing value in a crash safe manner

Excelfore Inc **Software Development Intern**.
- Integrated vehicle IOT services with a low latency video camera stream in C++
- Sped up face detection algorithm by 200% by implementing a prediction algorithm on a 30 MB/s video streaming pipeline
- Improved lane tracking application by minimizing calculations done per lane candidate leading to a 70% speed up

UCSD CSE Department **CS Tutor/Lab Lead**.
- Taught CSE 12/15L/110 - CS tutor for Data Structures, UNIX Lab, and Software Engineering under professor Gary Gillespie
- Assisted students in building high performance data structures such as Binary Trees, Hash Tables, Stacks, and Linked Lists in C, C++, and Java

Projects

Summer 2017 **Facebook MyRocks**.
Open Source Contributor
- Contributed to Facebook's MyRocks project, a fork of MySQL 5.6.35 that serves as the primary databse for all of Facebook
- Added statistical counters for deadlock and lock wait timeouts and amended InnoDB table statistics update bug
- Added diagnostic error messages for distinguishing between types of database deadlocks

Summer 2017 **Facebook RocksDB**.
Open Source Contributor
- Contributed to Facebook's RocksDB, a distributed key value store, used throughout the organization for building fast, scalable, high throughput distributed data stores
- Added deadlock tracking infrastructure to display the path upon which a deadlock occured.
- Designed highly efficient cache to store the n latest deadlocks that is currently exposed by MyRocks' engine transaction status command

Winter 2016 **Java Distributed File System**.
- Developed a distributed file system in Java that is optimized for storing and retrieving many smaller data files
- Designed system to chunk and send files over the network using Java's standard library sockets