

# Yosub Shin

120 Brenton Ct., Mountain View, CA, USA | 415-715-4956 | shin14@illinois.edu | github.com/YosubShin

## Education

University of Illinois at Urbana-Champaign, Urbana IL

December 2015

- Bachelor of Science in Computer Science

GPA : 3.93 / 4.00

## Relevant Courses

- Advanced Distributed Systems(CS525), Data Mining(CS512), Operating Systems(ECE391), Algorithms(CS473), Database Systems(CS411), Artificial Intelligence(CS440), Virtual Reality(CS498), Image Making(ARTD216), Typography(ARTD215)

## Experience

Distributed Protocols Research Group, UIUC, Urbana IL

March 2014 - Present

### *Undergraduate Researcher*

- Integrated Apache Cassandra with supercomputer to evaluate the characteristics of distributed key-value store in HPC environments
- Implemented algorithm to enable online reconfiguration of Column Family in Apache Cassandra
- Automated deploy of Apache Cassandra cluster on Emulab network testbed system for rapid testing

RocksDB, Facebook Open Academy, UIUC, Urbana IL

September 2014 - December 2014

### *Software Engineer*

- Implemented BW-Tree implementation of Memtable and achieved higher read performance than existing implementations
- Explored various data structures for in-memory workload and compared performance with current implementation of RocksDB
- Developed Yahoo! Cloud Service Benchmark binding for RocksDB to compare performances among different implementations

Computer Science Department, UIUC, Urbana IL

June 2014 - December 2014

### *Course Assistant for Data Structures(CS 225)*

- Taught at lab sessions to help students grasp concepts of various data structure elements
- Held office hours to help students solve Machine Problems that implement programs using data structures

IDINCU, Seoul Korea

May 2012 - December 2013

### *Software Engineer*

- Designed Domain Specific Language for selecting customers by their profiles, and implemented parser with ANTLR
- Designed storage system for personalized data of customers, implemented storage engine with MySQL and NFS
- Implemented Load Balancer of cloud service deployment system using HAProxy, enabled continuous availability
- Implemented SMS gateway system, with smooth failover support using ZooKeeper's leader selection algorithm
- Led overhaul project of payment gateway system which accepts various methods of payment
- Designed RPC daemon server with RabbitMQ to control customers accesses to web servers
- Built back-end daemon to filter users from their inputs, increasing the operators' efficiency by order of 100 times

## Activities

HackIllinois, Urbana IL

March 2015

- OculuScooter: Virtual scooter simulator which uses real scooter handle and user's own foot as inputs
- Won first place in hardware hacks among 900 participants and 180 projects (github.com/YosubShin/oculus-scooter)

HackMIT, Cambridge MA

October 2014

- Compilr: Web service that transcribes picture of printed source code snippet, and compile and run program on cloud

ShutterShare

January 2014 - May 2014

- Built mobile web service to share photos among closed groups conveniently with team of 3 members
- Implemented REST API with Java and Spring Framework to offer services to mobile clients (github.com/uiuc-app/shuttershare-api)

## Skills

- Programming languages : Java, C++, Python, Scala, JavaScript, Node.js, Swift, C, HTML, CSS
- Engineering Softwares / Technologies : Cassandra, Spark, RocksDB, MongoDB, MySQL, Unity 3D, Oculus Rift
- Graphic Design Softwares: InDesign, Illustrator, Photoshop, After Effects
- Spoken Languages : English, Korean

## Awards & Publications

Korean Presidential Scholarship

August 2008 - Present

- Full scholarship for undergraduate studies (total amount of \$200,000) given to 10 individuals annually