Yosub Shin

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

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), Typography(ARTD215)

Experience

Google, Mountain View CA
May 2015 - Present
Software Engineering Intern
- Implemented algorithms that enable efficient curations of Google's revenue logging system

Distributed Protocols Research Group, UIUC, Urbana IL
March 2014 - Present
Undergraduate Researcher
- Integrated Apache Cassandra with supercomputer to evaluate the characteristics of distributed kv-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
- 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 (oculuscooter.com)

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

Awards & Publications

IEEE International Conference on Cloud and Autonomic Computing, Cambridge MA
September 2015
- Accepted as first author for poster presentation of "Parqua: Online Reconfigurations in Virtual Ring-Based NoSQL Systems"

Best Research Projects, Advanced Distributed Systems (CS525), UIUC, Urbana IL
May 2015
- Recognized as one of the best research projects with "Cassandra on Blue Waters", which integrates distributed kv-store on HPC

Korean Presidential Scholarship
August 2008 - Present
- Full scholarship for undergraduate studies (total amount of $200,000) given to 10 individuals annually