WANG Ji

Phone: (+65)88582598
E-mail: jiwang.cs@gmail.com
Github ID: ijingo

Database Research Lab 3
01-07 COM 1
School of Computing
National University of Singapore

RESEACH INTRESETS

My research interests are on database kernels and distributed systems.

EDUCATION

National University of Singapore, Singapore
Candidate of Ph.D., Computer Science, Fall 2015 - Present

Harbin Institute of Technology, Harbin, Heilongjiang Province, China
Bachelor of Engineering, Computer Science, Fall 2011 - Fall 2015 Rank 5/169

PROJECTS

Apache SINGA
C++, CUDA, CUDNN, SWIG, Cmake, Protobuf, Python
SINGA is an Apache Incubator open source, distributed training platform for deep learning models, supporting both on CPU cluster and GPU cluster. I implemented the Alexnet and VGG-net model; Stochastic Gradient Descent Algorithms such as Adagrad, Adadelta, Adam; a checkpoint and resume module for training process; and a multi-GPU parallel tranining module. My commit list here. Project Github Repository.
Fall 2015 - Present

Rafiki
Python, Apache Mesos, Docker
A Deep Learning as a Service system built on top of Apache SINGA. Use Apache Mesos and Docker to allocate and manage the computation and storage resources. I mainly contributed to build the docker image and implement the Apache Mesos framework for Apache SINGA. Github Reposiotry (deprecated)
Spring 2016 - Fall 2016

U-Store
C++, ZeroMQ, Protobuf
UStore is a distributed storage system ultilizing data branching functionality, providing immutability, data sharing and security properties to the upper-layer applications. This project is closed-sourced and under construction for the present. I contribute the client server part which forward request and response between end user and storage server, as a core part of data replication using consistency hashing. I am implementing a blockchain analytic application on top of U-store. Project Website.
Spring 2016 - Present

BlockBench
C++, Golang, Shell
BlockBench is the first general benchmarking test suite for private blockchain platforms. BlockBench includes a set of macro-benchmark to give a overview of performance of private blockchains, as well as a set of micro-benchmark to test each layer of blockchain platform independently, i.e. consensus layer, data model layer and smart-contract execution layer. Now it can support Hyperledger fabric and Ethereum. I designed and implemented the workload driver and blockchain connector.
Oct 2016 - Present

EXPERIENCE

Teaching Assistant — National University of Singapore
Spring 2016 - Present — Singapore
Teaching assistant of CS5228 knowledge Discovery and Data Mining and CS2016 Operating Systems.

Teaching Assistant — Harbin Institute of Technology
Fall 2012 & Spring 2014 — Harbin, China
Teaching assistant of High-level Programming Language for undergraduate students.

President — ACM/ICPC Programming Team of Harbin Institute of Technology
2013-2015 — Harbin, China
Organizing daily training and college programming contests.

SELECTED HONORS

- **NUS Research Scholarship**
  National University of Singapore, 2015 - Present
- **Silver Medal**
  ACM-ICPC Asia regional contest - China Tonghua Invitational Programming Contest, 2013
- **Bronze Medal**
  ACM-ICPC Asia regional contest - China Chengdu Programming Contest, 2013
- **National Scholarship**
  Ministry of Education of The People's Republic of China, 2012
- **National People Scholarship**
  Harbin Institute of Technology, 2011-2013

SKILLS

Programming Languages: C/C++, Golang, Python, Java, Unix Shell
Working Environment: Vi/Vim, Git, Linux
Language: Chinese, English (CET-6)