# Zichen Zhu

zczhu2@cs.hku.hk

### **EDUCATION**

Hong Kong University

Sep 2017 – Present

- MPhil in Database group, Computer Science
- Research Interest: Database, Heterogeneous Information Network and Graph Algorithms
- Advisor: Prof. Reynold Cheng, Associate Professor of Computer Science at the University of Hong Kong

# Tsinghua University

Sep 2013 - July 2017

- Bachelor of Software Engineering
- Core Courses: System Analysis and Control (100,1/68), Cloud Database Management (99, 1/15), Network System (92, 4/31)

### **EXPERIENCE**

Data System Laboratory, SEAS, Harvard University, U.S.

June 2016 - Oct 2016 & July 2018 - Present

*Advisor*: *Prof. Stratos Idreos*, Assistant Professor of Computer Science at the Harvard John A. Paulson School of Engineering and Applied Sciences

Research Assistant Intern: Create & Design a front-end website present the complicated LSM-Tree structures and their corresponding difference.

Cloud Computing Group, Institute of Trustworthy Networks and Systems, Tsinghua

*Aug 2015 – Jun 2017* 

Advisor: Zhenhua Li, Assistant Professor of Cloud Computing Group, Institute of Trustworthy Networks and Systems, Tsinghua University

Research Assistant: Optimize the offline downloading redirector & establish the iDashBoard system, a private cloud platform

Users and Relation Group, Weibo Corporation, China

May 2017 – Aug 2017

System Developer Intern: Implement a middleware to support RPC and API verification between different platforms, also in charge of offline abnormal behaviors detection and analysis

### **PAPERS**

# Evaluating Top-k Meta Path Queries on Large Heterogeneous Information Networks

Nov 2017 – June 2018

- IEEE International Conference on Data Mining (ICDM) 2018
- Authors: Zichen Zhu, Reynold Cheng, Loc Do, Zhipeng Huang, Hoaci Zhang
- Propose a new method to measure the importance of a meta path between two nodes in Heterogeneous Information
   Network(HIN) and conduct a connectivity experiment to validate its performance

# Design Continuums and the Path Toward Self-Designing Key-Value Stores that Know and Learn

July 2017 - Oct 2018

- The biennial Conference on Innovative Data Systems Research (CIDR) 2019
- Authors: Stratos Idreos, Niv Dayan, Wilson Qin, Mali Akmanalp, Sophie Hilgard, Andrew Ross, James Lennon, Varun Jain, Harshita Gupta, David Li, Zichen Zhu
- Derive a more accurate model for lookup cost in Fluid LSM-Tree; Implement & Improve AutoTune in Monkey to optimize configuration parameters in LSM-Tree-based key-value store

More projects can be seen in my GitHub: github.com/littlepig2013

### **AWARDS**

- IEEE ICDM 2018 Student Travel Award
- Second prize in National Cloud Computing Application Innovation Contest 2016 (The 4<sup>th</sup> Place of 615 groups)
- First prize of Huayu Scholarship in Software department of Tsinghua University in 2016

### **SKILLS**

**Programming:** C++/C/Python/JavaScript/Erlang/Haskell/; **Web Development**: HTML/CSS/Django/Flask/CodeIgniter **Database**: Oracle/Cassandra/Redis/Bitcask/MySQL; **Distributed**: MapReduce/Spark/Giraph/PregelPlus