# YUE GONG

ightharpoonup yvetteyue1998@outlook.com  $\cdot$   $\$  (+86) 186-0549-1766  $\cdot$   $\$  snowgy  $\cdot$   $\$  homepage

#### **EDUCATION**

## Southern University of Science and Technology, Shenzhen, China

Sep.2016 - Present

Bechelar student in Computer Science and Engineering (CSE), expected June 2020

GPA: 3.88/4.00 (2/145)

# The University of British Columbia, Vancouver, CA

July.2018. - Aug.2018

Summer Session in Electrical and Computer Engineering (ECE)

GPA: 4.00/4.00

#### **EXPERIENCE**

### University of California, Irvine, Irvine, America

July.2019 - Sep.2019

Research Internship in Information and Computer Science Department (ICS)

#### Southern University of Science and Technology, Shenzhen, China

Sep.2018 - Jan.2018

Teaching Assistant in C and C++ Programming

# RESEARCH PROJECT

# Speed Up Query Execution by Pushdown In AsterixDB

July.2019 - Sep.2019

Individual Research Project Supervisor: Prof. Michael Carey

AsterixDB is a Big Data Management System. To avoid the expensive memory copy cost between operators (e.g. project, select, assign), we push execution logic down to the data-scan stage as much as possible for three patterns of queries.

- Explore three patterns of query on which pushdown can have a performance impact
- Integrate new rewriting rules into a large code-base and achieve at most 34.6% speed-up
- Design comprehensive benchmarks to test the performance

#### **Efficient Cache Management for Replicated Web Search Engine**

Sep.2018 - Present

Oct. 2015

Individual Research Project Supervisor: Prof. Bo Tang

National Mathematical Olympiad (National Third Prize)

Uniform caching scheme in most search engines simply caches the same content on all the servers which does not exploit the variations among queries. To tackle this limitation, we want to develop a new caching scheme which diversifies the cache contents in different servers by training past query log.

- Provide the theoretical inapproximability proof of diversified caching problem
- Implement a framework with a suite of techniques and heuristics for diversified caching
- Enhancing the cache admission process with semantic information of words.[in progress]

#### STANDARD TESTS

TOFEL Test: 109 (30R, 28L, 24S, 27W)	Feb.2019
GRE General Test: 321 (153V, 168Q)	May.2018
Honors and Awards	
HONORS AND AWARDS	
1 <sup>st</sup> Prize, Scholarship for Outstanding Student (5%)	Sep. 2017
2 <sup>nd</sup> Prize, Scholarship for Outstanding Student	Sep. 2018
Scholarship for Outstanding Fresher	Sep. 2016
National Chemical Olympiad (National Second Prize)	Oct. 2015