

JIALUN CAO

Mobile (+86) 1-595-959-5756

Blog: <https://arabelatso.github.io/about>

Email jcaoap@cse.ust.hk

Github: <https://github.com/ArabelaTso>

EDUCATIONAL BACKGROUND

The Hong Kong University of Science and Technology

Sep 2019 – Present

- Department of Computer Science and Engineering
- **Supervisor:** Shing-Chi CHEUNG
- **Research area:** deep learning system analysis, testing and debugging

M.S., University of Chinese Academy of Sciences

Sep 2016 – Sep 2019

- State Key Laboratory of Computer Science, Institute of Software, Chinese Academy of Sciences
- **Supervisor:** Yongjian LI
- **Major:** Computer Software and Theory
- **CGPA:** 88.31 (**Rank: 2 / 106, Top 2%**)

B.S., Shandong University

Sep 2012 - Jun 2016

- School of Mechanical, Electrical & Information Engineering, Computer Science Department
- **Major:** Digital Media Technology
- **CGPA:** 89.57 (**Rank: 2 / 52, Top 4%**)

HONORS AND AWARDS

- | | |
|-------------|---|
| 2019 – 2021 | Huawei Fellowship Scholarship |
| 2017 | China National Scholarship (Postgraduate, Rank 1/106, Top 1%) |
| 2014 | China National Scholarship (Undergraduate, Rank 1/52, Top 2%) |
| 2016 – 2019 | First-class Academic Scholarship (Postgraduate, Top 10%) |
| 2012 – 2016 | First Prize Scholarship (Top 10%) |
| 2012 – 2016 | Merit Student (Top 4%) |
| 2016 | Alibaba Tianchi & CCF Contest (Rank 13/2845, Top 0.46%) |
| 2015 | 1st Place Award: Imagine Cup Competition, International Microsoft Program |

PUBLICATIONS (In chronological order)

[USENIX Security 2021]

CCF-A

ReDoSHunter: A Combined Static and Dynamic Approach for Regular Expression DoS Detection.

Yeting LI, Zixuan CHEN, **Jialun CAO**, Zhiwu XU, Qiancheng PENG, Haiming CHEN, Liyuan CHEN

[ICSE 2021]

CCF-A

TransRegex: Multi-modal Regular Expression Synthesis by Generate-and-Repair.

Yeting LI, Shuaimin LI, Zhiwu XU, **Jialun CAO**, Zixuan CHEN, Yun HU, Haiming CHEN, Shing-Chi CHEUNG.

[ASE 2020] **CCF-A**

FlashRegex: Deducing Anti-ReDoS Regexes from Examples.

Yeting LI, Zhiwu XU, **Jialun CAO**, Haiming CHEN, Tingjian GE, Shing-Chi CHEUNG, Haoren ZHAO

[ICDE 2020] **CCF-A**

FlashSchema: Achieving High Quality XML Schemas with Powerful Inference Algorithms and Large-scale Schema Data.

Yeting LI, **Jialun CAO**, Haiming CHEN, Tingjian GE, Zhiwu XU, Qiancheng PENG

[DASFFA 2019] **CCF-B**

A Learning-Based Framework for Automatic Parameterized Verification.

Yongjian LI, **Jialun CAO (1st student author)**, Jun PANG

[ICCD 2019] **CCF-B**

A Learning-Based Framework for Automatic Parameterized Verification.

Yongjian LI, **Jialun CAO (1st student author)**, Jun PANG

[ASE 2018] **CCF-A**

L-CMP: an automatic learning-based parameterized verification tool.

Jialun CAO, Yongjian LI, Jun PANG

[QRS 2018] **CCF-C**

An Automatic Parameterized Verification of FLASH Cache Coherence Protocol.

Yongjian LI, **Jialun CAO (1st student author)**, Kaiqiang DUAN

TEACHING EXPERIENCE

HKUST COMP3021 Java Programming, Spring 2020. Teaching Assistant.

HKUST COMP3021 Java Programming, Fall 2020. Teaching Assistant.