# SONGQIANG CHEN (陈崧强)

M.Eng Student majoring in Software Engineering School of Computer Science, Wuhan University, China



#### RESEARCH INTERESTS

My research interests involve both AI4SE and SE4AI. Specifically, I devise deep learning-driven techniques to facilitate intelligent software engineering (for code, document, and linkage processing). Meanwhile, I explore efficient and systematic testing techniques (mainly based on Metamorphic Testing) for intelligent software (e.g., DL frameworks, QA software, Autonomous Driving systems, and translators), where I particularly value testing efficiency (e.g., on oracle & TCP) and diversity.

# **PUBLICATIONS**

[ASE'21] Testing Your Question Answering Software via Asking Recursively (this paper won the ACM SIGSOFT Distinguished Paper Award)
Songqiang Chen, Shuo Jin, and Xiaoyuan Xie

[ESEC/FSE'21] Validation on Machine Reading Comprehension Software without Annotated Labels: A Property-Based Method

Songgiang Chen, Shuo Jin, and Xiaoyuan Xie

[ASE'20] Stay Professional and Efficient: Automatically Generate Titles for Your Bug Reports Songqiang Chen, Xiaoyuan Xie, Bangguo Yin, Yuanxiang Ji, Lin Chen, and Baowen Xu

[ASE'22] Boosting the Revealing of Detected Violations in Deep Learning Testing: A Diversity-Guided Method

Xiaoyuan Xie, Pengbo Yin, and Songgiang Chen<sup>(#)(@)</sup>

[ISSRE'22] Towards the Robustness of Multiple Object Tracking Systems Xiaoyuan Xie, Ying Duan, Songqiang Chen<sup>(@)</sup>, and Jifeng Xuan

[ASE'21] Property-based Test for Part-of-Speech Tagging Tool (NIER Track) Shuo Jin, Songqiang Chen, and Xiaoyuan Xie

[ICPC'21] Where to Handle an Exception? Recommending Exception Handling Locations from a Global Perspective

Xiangyang Jia, Songqiang Chen(\*), Xingqi Zhou, Xintong Li, Run Yu, Xu Chen, and Jifeng Xuan

[IEEE TR] MULA: A Just-In-Time Multi-labeling System for Issue Reports
Xiaoyuan Xie, Yuhui Su, Songqiang Chen (@), Lin Chen, Jifeng Xuan, and Baowen Xu

[IEEE GRSL] Generating Multiscale Maps From Satellite Images via Series Generative Adversarial Networks

Xu Chen, Bangguo Yin, Songgiang Chen, Haifeng Li, and Tian Xu

[IEEE TGRS] SMAPGAN: Generative Adversarial Network-Based Semisupervised Styled Map Tile Generation Method

Xu Chen, <u>Songqiang Chen</u><sup>(\*)</sup>, Tian Xu, Bangguo Yin, Jian Peng, Xiaoming Mei, and Haifeng Li <sup>(\*)</sup>: I am the first student author. <sup>(#)</sup>: I am the co-first author. <sup>(®)</sup>: I am the (co-)corresponding author.

#### SELECTED PERSONAL HONORS

2020 - 2021 Master National Scholarship (Rank 1/264 in CS@WHU) - Ministry of Education of PRC

2019 CCF Elite Collegiate Award (ECA2019) - China Computer Federation (CCF)

2018 - 2019 National Scholarship - Ministry of Education of PRC

2017 - 2018 National Scholarship - Ministry of Education of PRC

Other scholarships awarded by Wuhan University, Huawei, Guotai J&A Securities, etc.

## **CONTACT**

#### **Email**

i9schen@gmail.com

## Homepage

https://imcsq.github.io

## **EDUCATION**

# School of Computer Science, Wuhan University | 2020-2023

Master of Engineering (MPhil), Major: Software Engineering, Supervisor: Prof. Xiaoyuan Xie,

Avg. Score: 93.3/100

# School of Computer Science, Wuhan University | 2016-2020

Bachelor of Engineering,

Major: Computer Science & Tech.,

GPA: 3.87/4.00

## **SERVICES**

PC Member in ASE 2022

Artifact Evaluation Track.

(more assistant review experience c.f. homepage)

TA of Compiler Principle course in CS @ WHU (2021 Spring).

#### RELEVANT SKILLS

English: IELTS 7.0 (sub  $\geq$  6.0)

**Comm & Leadership:** Experience as a class / SU leader and in coadvising research groupmates.

PL: Python, C++/C, Java

**Misc:** Office, PS, Setup of Device / Software (skilful:), etc.

Updated on Sept. 17<sup>th</sup>, 2022