CHIH-CHENG REX YUAN

hello@rexyuan.com

EDUCATION

National Taiwan Normal University   2014 - 2019
B.S. in Computer Science and Information Engineering

- Selected courses: Computational Logic (covers LTL, CTL, Hoare), Algorithms, Discrete Mathemetics, Automata Theory, Theory of Computing, Mathemetical logic, Logical Programming in Prolog, Functional Programming in Common Lisp; Programming Language in SML. Average GPA of above is **4.09** out of 4.3.

FLOLAC Summer School at National Taiwan University   2017, 2018, 2019
CONFESTA Summer School at University of Chinese Academy of Sciences   2018

EXPERIENCE

Formal Land   Paris/Remote
Formal Verification Engineer   2022 -

- Specification and verification of the OCaml codebase of Tezos economic protocol Jakarta with Coq.

Institute of Information Science, Academia Sinica   Taipei/Remote
Research Assistant   2019 - 2022

- Developed bit-level hardware verification safety algorithm based on algorithmic boolean learning and its implementation which solves about 300 of 747 instances in HWMCC10 benchmark. Optimized implementation with improved algorithm which combines learning and interpolation method solves about 400 instances.
- AIG input parser, solver interface, program data structures, profiling and logging, memory arena, and backend algorithm engines are independently implemented in C++ with minisat.

Institute of Information Science, Academia Sinica   Taipei/Remote
Adjunct Research Assistant   2017 - 2019

- SAT reduction of poset cover problem for message sequence chart synthesis implemented in Python with z3.
- NP-hardness of k-anonymity checking problem and a randomized approach thereof for the 2010 Taiwanese census data implemented in Python with MySQL.

INSIDE   Taipei
Software Engineering Intern   2016

- Backend Wordpress theme development; collaboration and communication with frontend team.
- In-house editor user-interface feature requests for editorial team.

INSIDE   Taipei
Editorial Intern   2015

- Coverage, interviewing, and reporting on technology and startup related scenes.

AWARDS & CERTIFICATES

Academic Excellence Award   2016
Ranked top 5% in a class

TOEFL iBT   2016
Score: 108 (Reading: 29 / Listening: 30 / Speaking: 22 / Writing: 27)

TOEIC   2013
Score: 960