Ding Guozhen

Phone: +1 (236) 591 - 0831   E-mail: mail@guozhen.dev
Personal Website: https://www.guozhen.dev

EDUCATION BACKGROUND

University of Toronto St. George, Canada   09/2019-06/2024
BASc - Computer Engineering (In progress)
cGPA: 3.98

WORKING EXPERIENCE

Rocscience Inc., Toronto, ON, Canada   05/2021 - 08/2021
Software Developer Intern
- Developed an easy-to-use, zero-installment web 3D-project review application
- Analyzed the extracted file format from RS3(i.e. the CAD software sold by Rocscience)
- Adapted Three.js framework to the internal file format generated by RS3

Intel Programmable Solutions Group, Toronto, ON, Canada   05/2022 - 09/2023
Software Engineer Intern
- Enhanced Intel's PTC (Power & Thermal Calculator) infrastructure to be more efficient for developers
- Implemented test infrastructure to increase the coverage for the overall codebase
- Advanced Intel's Quartus Power Analyzer by bringing up new device support

Toronto Systems Security Lab   05/2021 - Until Now
Research Assistant
- Enhanced the ZobmieFuzz framework by supporting buffer content manipulation
- Developed a standalone C/S application fuzzer by fuzzing the buffer at runtime using LibAFL

SKILL STACK

- C/C++/C#	- Python2/Python3	- Altium PCB Design
- LLVM/Clang	- ARMv7 Assembly	- Git/Perforce
- Verilog/SystemVerilog	- Linux/UNIX	- Rust
- JavaScript	- OpenGL/WebGL	

PROJECTS

Individual projects:
- An optimized Fuzzer targeted to the applications using stateful network protocol based on LLVM and AFL
- Reproduction of Learning to Predict 3D Objects with an Interpolation-based Differentiable Render

Group Projects
- Smart Door Lock(with RSA algorithm) implemented on DE1-SoC system with UART peripherals
- A fishing game(with PS/2 and VGA I/O) implement on DE1-SoC system (Based on ARMv7)
- A C++ GUI Map application using OpenStreetMap and ezgl.

ACADEMIC SCHOLARSHIP & COMPETITIONS

Academic scholarships:
- 05/2021   Edith Grace Buchan Undergraduate Research Fellowship
- 10/2020   Edward S Rogers Sr Department of ECE Top Student Award at University of Toronto
- 10/2020   The Wallberg Undergraduate Scholarships at University of Toronto
- 01/2020   2019-2020 Dean List of ECE at University of Toronto

Competitions attended:
- (Member of Team A*0*E) 4th Place at Las Vegas - DEFCON 27
- Sixth Place in the MEEPWN CTF Information Security Contest World Final 2018

ADDITIONAL SKILLS AND EXTRACURRICULAR ACTIVITIES

LANGUAGES: Mandarin Chinese (Native), English (IELTS 7.0)