# WEI-REN CHEN

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#### **EDUCATION**

## National Chiao Tung University, Taiwan (R.O.C.)

June 2010

M.S. in Computer Science & Engineering

Teaching Assistant of Computer Science Computer Center

#### WORK EXPERIENCE

#### SGS-TUV Saar

February 2019 - Present New Taipei City, Taiwan

Functional Safety Project Manager

- · ISO 26262 auditor and assessor.
- · Provide ISO 26262/ISO 21434/ISO 21448/ASPICE services.
- · IEEE SA member.
  - IEEE P2851 WG Secretary.
  - IEEE FSSC voting member.

#### Horizon Robotics Inc.

August 2018 - February 2019

Shanghai, China

Senior Software Engineer

- · Develop AI Toolchain for our AI accelerator.
- · Establish organization-wide policy and procedure complying with ISO 26262. After that, as the functional safety manager of our AI Toolchain project.
- · Internal trainer of ISO 26262 and ISO 21448.
- · IEEE SA member.
  - IEEE P2851 WG member and SG co-leader.
  - IEEE FSSC voting member.

#### Huawei Technologies Co. Ltd

Senior Software Engineer

December 2015 - August 2018

Zhejiang, China

- · Develop Clang/LLVM compiler, GNU binutils and GNU libgcc for our DSP.
- Develop DSL for our wireless team, for programming L1/L2 of 4G/5G. The DSL is data-flow programming paradigm aims to help programmer focus on the in/out of each operations, and let the compiler do the code generation and optimizations. I involves in the language design, and implementing compiler (Scala) from the front-end to the back-end.

## Generalplus Technology Inc.

November 2013 - December 2015

Software Engineer

Hsinchu, Taiwan

- · Develop DSL for our 4-bit RISC-like processor. Instead of programming in the assembly, a DSL is implemented to help our customer reducing the time to market. The compiler is not only a standalone tool, but also integrated in our IDE to help our customer catching syntax and semantic errors in the early stage of development.
- · Maintain 6502 C compiler and tool chain. The 6502 C compiler is derived from SDCC, integrated with our proprietary tool chain. My responsibilities also include helping our FAE programming the C code, and writing technical report to our customer (in English of course).

Research Assistant

Taipei, Taiwan · Research in compiler and virtualization techniques (QEMU and LLVM). Focus on binary translation

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- SGS-TUV Saar SOTIF Professionals valid until Nov. 2025.

and hardware performance profiling feedback optimization.

# OPEN SOURCE EXPERIENCE

- Cygwin hidapi port maintainer.
- Help LLVM community releasing its first ARM binary!