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

Horizon Robotics Inc. August 2018 - Present
Senior Software Engineer *Shanghai, China*

· Develop HBDK toolchain for our embedded AI chip.
· Establish ISO 26262 Functional Safety Process, mainly focus on Part 6 and Part 8.
· Functional Safety Manager of AI Toolchain.
· Member of IEEE P2851 FuSa, SOTIF and AI subgroups.

Huawei Technologies Co. Ltd December 2015 - August 2018
Senior Software Engineer *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).

Academia Sinica October 2010 - August 2013
Research Assistant *Taipei, Taiwan*

· Research in compiler and virtualization techniques (QEMU and LLVM). Focus on binary translation and hardware performance profiling feedback optimization.

OPEN SOURCE EXPERIENCE

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

TECHNICAL STRENGTHS

Computer Languages	C/C++, Scala
Tools	SVN/Git, Vim, Lex & Yacc