David Ko

vsxx.github.io

3102 Timber Village Dr. Houston, TX 77068

713-261-4667 davidpeterko@gmail.com

Education

University of Texas

Austin, TX

BS, Computer Science

August 2009 - August 2015

Relevant courses: Principles of Computer Systems (OS), Information Assurance and Security,
Computer Security, Cryptography, Data Visualization and Warehousing.

Work Experience

M&D Distributors

Humble, TX

Internship for IT Security

June 2014 - August 2014

- Maintained network and computer security in IT.
- Used various resources and software such as Spiceworks, WatchGuard, and WireShark.

School Projects

PintOS Austin, TX

University of Texas GDC Computer Lab

August 2014 - December 2014

- Semester long project in which we implement parts of the PintOS operating system.
- Implemented: Basic Shell, Threads, Virtual Memory, User Programs, File System.
- PintOS coursework was done in groups of 4 throughout semester.
- Source code, information, and git logs can be found in my portfolio.

AES Implementation

Austin, TX

University of Texas GDC Computer Lab

June 2015 - July 2015

- Implemented AES-256 in Java following the AES Standard in ECB mode.
- Implemented each part of the AES: subBytes, shiftRows, mixColumns, and addRoundkey.
- Learn full understanding of Rijndael's AES Standard.

Other Projects

UBC and at home 1999-2000

- Designed and debugged a digital voltmeter using a Motorola 68000 processor.
- Added features to the digital voltmeter including scrolling text, and a warning buzzer, which won 3rd place in the IEEE Voltmeter Competition.
- Constructed and debugged a digital clock on a PCB for PHYS 159.
- Built an AM short-wave radio at home, on a 2" × 2.5" piece of breadboard.

Awards

Skills

Languages: C/C++, Java, L^AT_EX, Python, x86 Assembly, Javascript, Python, PHP, Ruby, Haskell, Yacc.

Operating Systems: Linux (Ubuntu, Kali, MINT, Arch), MacOS X, Windows XP/7/8.

Applications & Tools: VIM (preferred editor), Git Source Control, Eclipse, IATEX, Google Test, Valgrind, DOxygen (Documentation), Travis CI (Continuous Integration), ZShell, Kali Linux Tools and associated software (i.e. Metasploit).

Miscellaneous: Competent with Kali Linux (academic/ethical hacking), advanced and experienced with using terminal, knowledge of advanced cryptography (applied and theoretical).

Interests

Academic: Solid state devices, nanotechnology, photonics, microcontrollers, RF/wireless

Sports: Playing hockey and swimming

Computers: Currently maintain two official Debian Linux packages, Mozilla beta tester, enjoy using and learning Linux systems, Building electronics projects at home, and writing JAVA software

Musical: Playing guitar and piano

Membership: Student member of IEEE since 1998, Materials Research Society member since 2002

Other: Reading novels