

PETER C. THOMPSON

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SUMMARY OF EXPERIENCE

Over 20 years experience in international standards and systems engineering. I led IEC 61980-2, ISO 15118-2, IEC 63110-2, SyncML, and OMA DM. I have also worked with SAE (J2954, J2847), ISO (19363) and IEC (61980) I have worked as systems engineer for various projects (augmented reality, electric vehicle chargers, and data synchronization). I am skilled in several of the common languages (C, C++, Java, Python, etc). I love to build things and work with people that build things (For example, I built my own electric car, and automated my greenhouse for jungle cactus).

HIGHLIGHTS

Standards developed:

- SAE: J2847/6, J2931/6, J2954
- IEC: 63110, and 61980 series
- ISO: 15118, 19363
- OMA: DM, DS (both derived from SyncML)

Software experience:

- C, C++, Objective-C, Java, Python
- Windows, MacOSX, Android and iOS

PROFESSIONAL EXPERIENCE

ChargePoint, Incorporated, Campbell October 2019 to Present
Standards Engineer: IEC 63110 (EVSE to Charging Station) and ISO 15118 (Charging Station to EV).
Systems Engineer: Improving communication between hardware, software, and product. Creating a lab for testing out conformance to standards.

Qualcomm Incorporated, San Diego February 2004 to September 2018
Last project:
Standards Engineer for Halo – a project to wirelessly charge electric vehicles. Driving the communication standards: SAE J2847/6, J2931/6 and J2954; ISO 15118 and 19363; and IEC 61980.
Previous projects:
Systems Engineer for Augmented Reality project (Vuforia) – providing high level architecture designs.

Standards Engineer for the Open Mobile Alliance. Chair of the OMA Device Management (DM) working group for 4 years, Drove the development of OMA DM v1.2 and v1.3, and provided significant functionality to the various management objects.

Self Employed, Santa Cruz January 2003 to January 2004
Worked with several companies to determine their course of interaction with international mobile standards such as OMA, 3GPP and IrDA. Worked with the OMA Data Sync group as an invited technical expert. Technical editor for Project Liberty.

Starfish Software, Scotts Valley October 1997 to January 2003
Chairman of SyncML Technical Committee – representing Starfish and Motorola.
Lead technical development of the SyncML specifications.
Co-authored book: "SyncML: Synchronizing and Managing Your Mobile Data", published September 2002.
Design, document and implement next generation of PIM.
Wrote several software interfaces for TrueSync (such as Outlook).

Filoli Information Systems, Co., Palo Alto February 1996 to April 1997
Design and implement windows as a member of a large team on an object-oriented distributed database project on NeXTStep.
Improve workflow automation tools.
Monitor performance of application, work with other engineers to improve the speed of processing.
Design and implement objects for an automated test program.

Triton Technology Inc., Watsonville April 1995 to February 1996
Design and implement a series of cross-platform plotter classes for real-time data display.
Design and implement a real-time graphic display, for monitoring ship under Windows 3.1.
Modify existing software to convert old data and perform real-time display of the data.
Design and implement a pipeline tracking, along with real-time image display under Windows 3.1.
Design and implement a cross-platform C++ class for communicating with a wide variety of printers.

Galil Motion Control Inc., Sunnyvale June 1991 to April 1995
Design and implement a variety of new tools in C++. Improve existing Motor tuning tools.
Design and implement C++ tool for selecting motors, amplifiers, and controller.
Design and implement C++ translator for MS-DOS and MS-Windows, converting Autocad DXF output to motion output.
Design and implement C translator for MS-DOS, converting HP Plotter output to motion output.
Design and implement windows tool to help a novice user set up, tune and debug a motion system.

Design and implement Windows NT Driver.

Design and implement several different VBXs, such as storage scope and 3D motion.

Nanometrics Inc., Sunnyvale

February 1989 to June 1991

Lead a team of 5 software developers. Bring in Unix workstations for group software development. Design, implement and train source control in group software development. Redesign and implement a Scanning Electron Microscope for semiconductor wafers. Convert existing Scanning Electron Microscope software to run in Protected Mode on MS-DOS.

Design and implement a network of 10 Unix (HP/Apollo) workstations, complete with UUCP connection.

Design object oriented Scanning Electron Microscope – hardware as well as software.

Design object oriented data collection station.

Implement new version of Automatic Thin Film Measurement tool.

Improve SECS-II interface in Scanning Electron Microscope.

SiScan Inc., Campbell

November 1986 to February 1989

Design and implement new sub-systems for a Confocal Laser Microscope for semiconductor wafers.

Design and implement embedded user interface, using both text and graphics.

Design and implement line width measurement routine.

Improve graphics routines – increase speed, and add functionality.

Implement SECS-II interface.

Design and implement in-house tools based on Sunview.

FMC Corp, Ordnance Division, San Jose

April 1985 to November 1986

Member of team working on experimental tank crew station. Design and implement graphics system to use live video and touch screen. Lead team into finished product.

Improve 8086 based multi-tasking operating system.

Design and implement 8 line serial I/O to extend the operating system.

Design and implement a graphics system based on GKS to run on a multi-tasking operating system.

Design and Lead: voice recognition, voice synthesis, and an image processing system.

Atari Games Corp., Milpitas

August 1982 to April 1985

Develop games for arcade video game. Work closely with hardware, graphics, and especially marketing personnel to bring a video game to production.

Design, implement and ship a 68000 based arcade video game (Packrat).

Design and implement diagnostics for the 68000 based video game.

Extend a Forth-based development workstation to work with a T-11 processor.

EDUCATION

BS, Electrical Engineering, Computer Science, University of California, Berkeley, 1982.
Project Management training.
Object-oriented training – C++, C#, Objective-C.
SQL Training. Training in Relational Databases.

OTHER

Co-author of "SyncML: Synchronizing and Managing Your Mobile Data", published September 2002.

Built my own electric car in 2011, using a Porsche 914 for the chassis. Details on the build can be found at: <http://cruzware.com/peter/blog>

Automated my greenhouse to house fussy jungle cactus.