

Franck Parat | Embedded Software Engineer

☎ +86 135 6420 1140 • ✉ franck.parat@gmail.com

Engineering skills

Key programming skills: C (bare metal), Python 2/3, VHDL (FPGA)

Embedded engineering: UART, SPI, CAN, LIN, K-Line, I²C, ADC, DAC, timers, interrupts, HAL

Hardware: Debugging, usage of oscilloscope, soldering, reading of schematics and datasheets

Also: C++, Assembly, Java, Javascript, Typescript (Angular), Batch, Latex

Tools: Git, Subversion, Ceedling (test framework for C), Sphinx (documentation), "Unix" utilities

Experience

ART Logics

Shanghai

Automotive Testing Industry, Embedded Software Engineer

2014–2018

Worked on the logic implementation of key products of the company.

- Maintainer of the TCU/CCU firmwares, core products of the company (SPC56, PIC24):
 - Design and implementation of new features.
 - Port the code to the sibling product CCU100, and the successor TCU110;
 - Refactoring of the code for supporting multiple products with a single codebase.
 - Integrated unit testing and documentation generation in the workflow.
- Development and maintenance of FPGA "firmwares" (Xilinx Spartan 6):
 - Bug fixes and stabilization of boards in production;
 - Design and development of several boards.
- Design and development of smaller products based on PIC24, with LIN and UART interfaces.
- Creation of a desktop application for UART or Ethernet communication. Based on Python and wxWidgets.
- Development of a desktop application for the calibration of several products. Based on Python and Tkinter.

Education

National University of Singapore

Singapore

Exchange program

2013–2014

Exchange program for 2 semesters (Embedded Systems, Computer Science, Multimedia)

ENSEA

Cergy

Engineer degree (master level)

2011–2014

Graduate School of Electrical Engineering and Computer Science

Lycee Saint-Louis

Paris

"Classe Préparatoire aux Grandes Ecoles"

2009–2011

MPSI, PSI: Advanced Mathematics, Physics and Engineering Science

Languages

French: Mother tongue

Chinese (mandarin): Conversational

English: Fluent. TOEIC: 930, TOEFL: 93