XUSONG WANG

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OBJECTIVE

Information Technology Master student at the University of Stuttgart. Inquisitive, hard-working and consistent with previous working experience.

EDUCATION

University of Stuttgart , Stuttgart — *Oct 2018 - Present*
Master in **Information Technology** — Note: gut
Chongqing University, Chongqing — *Sep 2013 - July 2015*
Master in **Vehicle Engineering** — Note: gut
Chongqing University, Chongqing — *Sep 2009- July 2013*
Bachelor in **Electronic Information Engineering** — Note: gut

WORK EXPERIENCE

dSPACE Mechatronic Control Technology Co., Ltd., Shanghai — July 2015 - Aug 2018
Field Application Engineer(Full-time)

· Fully supports for Rapid Control Prototyping(RCP) hardware and software solutions from dSPACE based on requirements of customers, partially supports for the Hardware in the loop(HIL) testing, Automatic Code Generation(Targetlink and AUTOSAR).

United Automotive Electronic Systems, Chongqing — May 2014 - Sep 2014
Test Engineer(Internship)

· With the test benches laboratories erected by Bosch, to calibrate engine management system and test both on the test benches and road, mainly aim to optimize the performance and meet the emission standards.

PROJECTS

Automobile Bus system contoller
With the permission of the owner, to hack the bus-system by implementing a CAN transceiver deployed onto the OBD of the vehicle, to gain control of the car's body partially. Subsequently, we rebuild the throttle paddle and other sensors with our controller, e.g. bypass it with an additional ADC/DAC, in some cases, we are able to enable the kl15, kl30, air-conditioner, even throttle as requirements, which is controller on an application of cellphone or a web window .
Technology/Tools: C, Codewarrior, CAN, JAVA

Implementation of ADMM for Image processing
Image processing by implementing an alternating direction method of multipliers(ADMM), to migrate referenced Python code to C/C++ and OpenCL code based on GPU. Research involving implementation Conjugated Gradient(CG), Proximal Algorithms etc.
Technology/Tools: Python, C/C++, OpenCL, Eclipse

Construction of ECU test bench
Using dSPACE tool-chain to construct ECU(such EMS, VCU, TCU and MCU) RCP/HIL test bench for the customer. Follow the entire open/closed-loop test standard, from the signal list, wire making, Simulink model interface debugging, training, automation test case coding and to the final turnkey solution.

Technology/Tools: Matlab/Simulink, ControlDesk, CANMM, etc.

TECHNICAL STRENGTHS

Programming Languages	Python, C/C++, Javascript, VHDL, openCL
Software&Tool	Mattab/Simulink, tensorflow, Jupyter, INCA, Wireshark, RTmaps
General Skills	Linux, CSS, HTML5, LaTex, Burp Suite, MS office

CERTIFICATION

- Four patents (CN107264528B, CN103863249A, CN203496814U, CN103612593A), 2015 Chongqing
- dSPACE Controldesk Advanced/FPGA/SCALEXIO training, 2016 Paderborn
- Excellent master student of Chongqing Province, 2015 Chongqing
- IELTS 6.5, 2018 Shanghai
- German language courses qualification of A2, B1, B2.1, 2019 Stuttgart
- Chinese driving license (Fhrerschein Umschreibung laufend)