Contact

Phone:

+(86) 18845646427

Email:

mzn836443465@163.com

Education

2016 - 2019

Master degree in electrical engineering

Harbin University of Science and Technology

2011 - 2015

Bachelor degree in control engineering

Northeast Electric Power University

Skills

- C/C++
- MATLAB
- PYTHON
- MCU
- FPGA

Language

Chinese： mother tongue

Englisch： B1

Deutsch： A1

Zhengnan **Ma**

- Master of Electrical Engineering: Wireless Power Transfer, Power Supplies, Emphasis on Motor Drivers
- 4 years of work experience, main work areas: servo motor control software development, MCU and FPGA programming

Experience

7/2020 – NOW

Mobo Robotics Company (Hangzhou/China)

Embedded software and servo drive engineer

Temperature sensor

- Develop drive code based on stm32, calibration and temperature data analysis.

Vibration sensor

- Develop drive code based on stm32.

Servo driver

- Three closed loop controller (current/speed/position loop).
- Torque disturbance observer (Observe and compensate for disturbance torque).
- Speed observer (Reduce speed fluctuation and improve speed loop response).
- Vibration suppression (Suppress and eliminate resonance generated by the system).

7/2019 – 7/2020

Veichi Company (Shenzheng/China)

Servo drive engineer

Basic servo diver software maintenance.

- Fixed the bug of software in servo drive.

Servo driver motion control development

- Electronic cam development (Users can set the servo motor motion trajectory).
- Chasing shear development (Construction metal cutting).
- Flying shear development (Steel rolling, paper making and other production lines).

Personal Project

Motor control simulation with c/cpp.

- Modeling three phase AC motor and inverter with C programming
- Three closed loop controller (current/speed/position loop).
- Torque disturbance observer, speed observer, vibration suppression, adaptive control and robust control.
- Using matplotlibcpp to generate waveform of controller and motor.

Publication

Research on Double LCC Compensation Network for Multi-Resonant Point Switching in Underwater Wireless Power Transfer System (https://www.mdpi.com/2079-9292/12/13/2798)