Nguyen Thien Phuoc

Date of birth April, 11st 1996

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Personal Page https://poloko159.github.io/index.html
Current address No 32-2, Dongning, Tainan, Taiwan

SKILLS

Control System modelling, control theory, identification, optimization design, MPC, math.

Programming C++, C#, Matlab-Simulink.

Embedded systems Experienced knowledge of PC base, MCU base, embedded computer base, HIL.

Project managing and planning Plan, manage, and execute projects

Academic research
Test benches

Electric motor and drive, PMSM, Synchronous motor, inverter, observers.

Motor testing, test bench analysis, develop, implement and validation.

Experienced knowledge of dynamometer, electrical break, torque sensor.

Fault analysis Drive fault detection, analysis and provide solution.

EDUCATION

SEP 2014 - DEC 2019 University of science and technology - the university of Danang

Major: BS in control engineering and automation

GPA: 3.18/4

Graduation thesis: Model predictive control of ball and plate based sequential quadratic

programming.

FEB 2020 – DEC 2021 National Cheng Kung University

Major: Ms in field of Electrical motor and drive for Electric Vehicle. Research topic: Control scheme for motor (FOC, DTC, DFC).

Observer (Flux, parameter variation).

Sensorless control.

WORK EXPERIENCE

AUG 2017 - APR 2018 Electrical Engineering Laboratory - University of Science and

Technology - The University of Danang

Internship

Research Assistant.

AUG 2017 - APR 2018 Macty Company

Part-time job Junior partner.

PROJECTS, COMPETITION AND ACIVITIES

FEB 2020 – DEC 2021 Research assistant

Responsibilities: High speed region control research, develop and implementation of

synchronous motor. **Achievement:** incoming.

FEB 2021 – OCT 2021 E-Bike traction drive research: Hyena e-bike

Responsibilities: system modelling, control algorithm, and implementation.

Achievement: Torque control implementation for electric power assist system – e-bike.

FEB 2020 – DEC 2020 High precision modeling of designed motor and control – Jmag - Simulink

Responsibilities: system modelling, control algorithm, and implementation. **Achievement**: Detailed model of designed motor and control implementation.

AUG 2018 – DEC 2018 Graduation Project: Research and design the Nonlinear Model Predictive Control for ball

and plate balancing system.

Responsibilities: Design and implement the system including hardware and software. **Achievement**: Real time Nonlinear model predictive control for trajectory tracking of ball

and plate system.

SEP 2017 – FEB 2018 Digital racing competition -FPT software.

Team leader, programmer.

Responsibilities: Team leader, project manager, developer.

Achievement: development of Traffic Sign Detection application-based Computer-vision.

OCT 2017 – JAN 2018 ASU/AWS EduHackathon 2017

Team leader, programmer.

Responsibilities: Team leader, project manager, developer.

Achievement: development of management software-based Amazon web Services.

JUL 2017 – AUG 2017 DAEGU-DANANG - University Student International Exchange Program

Exchange student at Korea.



FEB 2017 – JUN 2017 Science research competition - The University of DaNang

Developer

Responsibilities: hardware design and implement, developer.

Achievement: smart IOT manager system in small business in food industry.

APR 2016 – JAN 2017 Robocon competition - The University of DaNang

Mechanical design

Responsibilities: Design and implement robot model.

Achievement: Development of self-driving robot, analysis, control implementation,

validation and modification of object.

HONORS & AWARDS

2014, 2016, 2017, 2018 University of Science and Technology - The University of Danang Scholarships

SEP 2018 Certificate of good student 2017-2018.

2020,2021 NCKU Distinguished Scholarship

LANGUAGES

ENGLISH IELTS 6.0 (2019-2021)