CHUN–WEI, KONG

Aerospace Engineering Graduate

chunwei@umich.edu (+1) 734–263–7719 Ann Arbor, Michigan

https://jordan787878.github.io/firstweb/ www.linkedin.com/in/chunwei–k

PROFILE

I have been involved in over 5 aerospace engineering projects and published 2 journal papers. Currently, I am studying electric propulsion and spacecraft system in University of Michigan, which I believe will lead us to deep space exploration.

EXPERIENCE

Researcher 2020 – present

Taiwan

- Collaborate with a Postdoc in Arizona State University on the "optimal trajectory control for deepstall aircraft" project, which requires data driven model and nonlinear control method.
- Developed the autonomous spraying quadcopter simulation and control system using sensor fusion.
- Co-author of the journal paper "A State-of-the-Art Analysis of Obstacle Avoidance Methods from the Perspective of an Agricultural Sprayer UAV's Operation Scenario"
- Developed 6DOF quadcopter simulation and designed various control methods, including Deep Reinforcement Learning controller, fuzzy controller, LQG controller and so on.

Leader of the micro gas turbine student project 2018 – 2019

National Chen's Kung University, Taiwan

- First author of the journal paper "An Efficient Procedure for Designing Various Series of Centrifugal Compressor Impellers"
- Developed specialized programs (C++ and MATLAB) to determine crucial parameter of the jet engine.
- Did computational flow simulation for main components and set up experiment to examine components' performance.
- Developed programs to analyze the operating points based on the experiment data and numerical simulation.
- Built and tested the prototype of the micro gas turbine engine.

Intern 2017 Summer

National Chung–Shan Institute of Science and Technologh, Taiwan

- Participated in gas turbine generator experiment.
- Acquired the highest performance assessment: 90.6/100
- Delivered a final report about implementing automatic optimization on impeller design.

EDUCATION

M.S. / Aerospace Engineering 2021–present

University of Michigan, Ann Arbor, U.S.

B.A. / Aeronautics and Astronautics 2015–2019

National Cheng Kung University, Tainan, Taiwan

KEY SKILLS

Modeling and Simulation, Autonomous Vehicles, Computational Fluid Dynamics,
C++, Python, MATLAB/Simulink, HTML