



Mostafa Rushdi

Postdoc Researcher
Aerospace Engineering

26 October 1991

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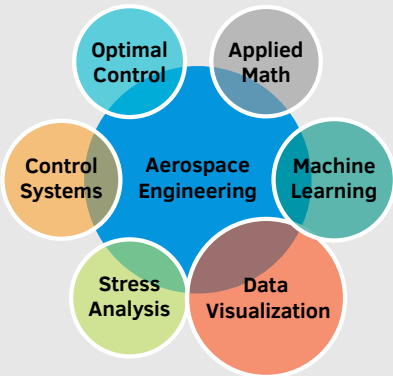
Dazaifu, Fukuoka, Japan

morushti.github.io

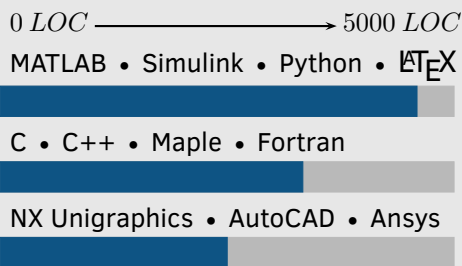
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mostafa-rushdi

Skills Overview



Programming



Projects

List - Available upon request.

Biosketch

Mostafa is an energetic, results-oriented, Aeronautical Engineer. He is currently a postdoctoral researcher at the Research Institute for Applied Mechanics (RIAM), Kyushu University. He received a PhD degree at Kyushu University in Fukuoka, Japan, and has completed MSc and BSc degrees in Aeronautical and Aerospace Engineering from Cairo University, Egypt. Mostafa's research interests include guidance, control systems, embedded systems, optimization, and dynamics especially related to renewable energy systems. Recently, he is interested in the hot topics of ML, DL, AI, and data science in general.

Education

- 2017-2021
Ph.D., Airborne Wind Energy Systems
Kyushu University, Japan
Research on kite systems for energy harvesting, at the department of ESST - IGSES.
Thesis: "AirborneWind Energy Systems: Flight Data Analysis Using System Identification and Machine Learning, and Control of Launching."
- 2014-2017
M.Sc., Aeronautical & Aerospace Engineering
Cairo University, Egypt
Thesis: "Optimal Aircraft Evasion Trajectory: Analysis and Simulation of the Target-Attacker and the Target-Attacker-Defender Problems."
- 2009-2013
B.Sc., Aeronautical & Aerospace Engineering
Cairo University, Egypt
Graduation Project: "Micro-Flapping Air vehicle"

Professional Experience

- 3.2021-present
Postdoctoral Researcher
RIAM, Kyushu University, Japan
Working on several projects related to renewable energy using machine learning methods.
- 4.2019-7.2019
Intern, Airborne wind energy compony
Kitepower, Delft, Netherlands
Working with the company team on dynamic modelling and control of a rigid vertical take off landing aircraft and simulation of the power cycle aiming to maximize the generated electricity.
- 4.2015-10.2017
Teaching Assistant
Future University, Cairo, Egypt
Assisted in teaching courses on: Introduction to Embedded systems, PLC, Quality control, Dynamics of rigid bodies, Mechanical Mechanisms, Stress Analysis, Properties of materials.
- 2012
Intern, Aeronautical Engineering Labs
EgyptAir, Cairo, Egypt
Trained on systems of the commercial passenger jet Airbus 320. Attended workshops on: "Turbofan Engine Overhaul". Tested and validated oxygen cylinders, landing gears, and escape slides.
- 2011 - 2013
Intern, Egypt CAN-Sat
Space Systems Technology Laboratory, Cairo, Egypt
Developed a circit using an Mbed microcontroller to interface with different sensors: pressure, temperature, accelerometer, gyroscope, GPS sensors, and wireless module XBEE. Also, organized Can-Sat Training Program (CTP2).

Selected Awards

- **Top Mechanical Project Award, CANSAT project**, by the *Egyptian Engineering Day (EED)*, Cairo Egypt, 2011.

Publications

