



Mostafa Rushdi

Research Assistant Prof.
Aerospace Engineering

 26 October 1991

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 Dazaifu, Fukuoka, Japan

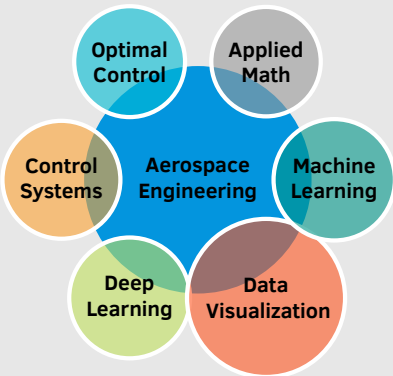
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 mostafa-rushdi

Skills

Overview



Programming

0 LOC —————> 5000 LOC

MATLAB • Simulink • Python • \LaTeX

Jupyter • Scikit-Learn • Tensorflow

C • C++ • AutoCAD • Ansys

Projects

List - Available upon request.

Biosketch

Mostafa is an energetic, results-oriented, Aeronautical Engineer. He is currently a research assistant professor 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. He combined ML/DL with his work in renewable energy systems and published a few papers.

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

- 5.2022-present **Research Assistant Professor** RIAM, Kyushu University, Japan
Applying data science to different fields.
- 3.2021-4.2022 **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 company** Kitepower, Delft, Netherlands
Working with the company team on dynamic modeling 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.

Selected Awards

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

Publications

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