



MATLAB based Multi-Objective Genetic Algorithm Optimization solver for Axial Flux Machines

Page
1 of 1

Issued By
Bharadwaj
Raghuraman
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Background

Axial flux machines with their inherent high torque density and power density have been the main machine topology in electric and hybrid supercars. With diverse objectives for these kinds of machines such as high peak torque as well as peak efficiency at low torque and high speeds, need for a multi-objective genetic algorithm optimization solver is high.

Aim

This project's aim is to build an optimizer in MATLAB environment which can design an axial flux electric machine by using Genetic algorithm solvers.

Skills Required

1. Masters' student specializing in electric machine design
2. Excellent knowledge in analytical design and analysis of PM machines.
3. Good practical knowledge in FEA tools for 3D/2D calculations.
4. Excellent coding skills on MATLAB and Simulink environment.

Where

Ängelholm, Sweden

Duration

5 to 7 months

Start date is negotiable (Preferably between mid of January – February 2023)

Type of contract

The activity can be formalized as internship, MSc Thesis or aggregate of the two

Contacts

gianmario.pellegrino@polito.it