Overview

I am a PhD student at Aarhus University, specializing in Mechanical Engineering. My research centers on turbulent flow control and relaminarization over both smooth and rough surfaces, with applications in piping systems and the maritime industry. My primary focus is on identifying and implementing effective active and passive flow control strategies to enhance energy-efficient drag reduction in fluid mechanics systems.
My academic interests encompass wall-bounded flows, which I study using Direct Numerical Simulation (DNS) and Large Eddy Simulation (LES) techniques, along with experimental investigations.

Employment

Since Aug. 2022	Ph.D. Fellow at the Mechanical & Production Engineering Department at Aarhus University, Aarhus, Denmark.

Education

Since Aug. 2022	Ph.D. Student in Mechanical Engineering, Aarhus University, Aarhus, Denmark.
	•Ph.D. Project: Turbulent Flow Control: Turbulent Drag Reduction Over Rough Surfaces
2018–2021	M.Sc. in Mechanical Engineering, Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran.
	•M.Sc. Thesis: Turbulent Flow Control: Shape Optimization of A Blended Winglet: An analysis through CFD simulations and wind tunnel testing

Research Interests

- oHigh-Fidelity Numerical Simulations
- oTurbulent Flow Control
- oPhysics of Wall-Bounded Flows
- oExperimental Aero & Hydrodynamics
- o Shape optimization

Languages

Persian	Native
English	Professional Proficiency