







Looking to Explore New Frontiers in Hypersonic Aerodynamics?

The Applied Aerodynamics & Aeroacoustics Research Lab (A³RL) is looking for excellent M.Sc. and Ph.D. students to join our exciting research to understand how surface gaps induce

boundary layer transition in hypersonic flows critical phenomenon for optimizing performance of hypersonic vehicles!



The project combines high-fidelity CFD simulations (LES & DNS) and linear stability analysis to uncover how gaps affect flow stability, drag, and heat transfer. You'll gain hands-on experience with advanced computational tools (Cadence CharLES and Simulia PowerFLOW) while contributing to innovative findings that impact the future of aerospace engineering.

What You'll Do?

- Conduct CFD simulations of super- and hyper-sonic flows to study gapinduced instabilities.
- Analyze transition mechanisms and develop predictive models.
- Collaborate with leading researchers and present your work at international conferences.

Why Join?

- Be part of an impactful project advancing hypersonic technology.
- Develop expertise in CFD, stability analysis, and hypersonic aerodynamics.
- Gain experience in basic and applied research to pave the way to a rewarding career in academia and industry.

Background

- Numerical analysis, incompressible / compressible / viscous flow.
- Advantage experience in CFD, hypersonic flows, and stability analysis.



Interested?

Contact Dr. Hadar Ben-Gida

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Applicants should provide a detailed CV + up-to-date transcript of current degree

