

PhD position openings

in computational hypersonics, aerothermal fluid-material interaction and data-assimilation in compressible flows

Tags: CFD | Hypersonics | High-speed combustion | Multiphysics Turbulence | Scientific Machine Learning | Data-driven modeling and assimilation

The compressible CFD group at Iowa State University has multiple fully funded Ph.D. positions. The PhD projects will broadly focus on high fidelity simulations and data-assimilated modeling of flows relevant to aerodynamics and propulsion for high speed flight. The academic advisor for the positions is Prof. Sidharth GS (lab website: <https://sid-gs.github.io>).

Our lab provides training and research experience at the intersection of fluid mechanics, energetics, numerical modeling of PDEs, high performance parallel computing, statistical data analysis and machine learning. We collaborate with researchers across different University groups, research labs (NASA/DOE/DOD) and industry, to provide professional development opportunities in addition to publishing opportunities in top-tier scientific journals.

Requirements:

- » Motivated and creative applicants with Bachelors/Masters degree in any of the following: Aerospace/Mechanical engineering, Applied mathematics or Physics.
- » Strong background in thermofluids, mechanics, linear algebra and numerical techniques.
- » Prior experience in C++/Fortran programming, CFD, scientific computing is highly preferred.

Interested applicants are requested to direct their queries and send their transcripts, CV and a brief statement about past work/projects to sidgs@iastate.edu.

Apply for Fall 2023

Graduate school applications for Fall 2023 are due by Jan 15th 2023. If interested, please find more details at <https://www.grad-college.iastate.edu/academics/programs/apresults.php?id=2>