

PhD Graduate Research Assistant Opportunity in Computational Hypersonic Research

The Department of Mechanical, Aerospace, and Biomedical Engineering (MABE) program is seeking to fund **two** PhD graduate research assistant to **perform research in hypersonic propulsion, computational fluid dynamics, uncertainty quantification for CFD, and related areas**. The successful applicant will be advised by faculty in the Department of Mechanical, Aerospace, and Biomedical Engineering at the University of Tennessee Space Institute in Tullahoma, TN.

Minimum Qualifications

Highly motivated and enthusiastic candidates with strong interests in hypersonic technology, propulsion, combustion, computational methods, fluid dynamics, are invited to apply. Candidates should hold an BS degree (or equivalent) in Aerospace or Mechanical engineering or a closely related field. Evidence of excellent written and oral communications, as well as strong organizational skills is required. Research experience in computational fluid dynamics is preferred. **Applicants with a MS degree (or equivalent) are preferred.** Students at the University of Tennessee are expected to understand and be ethical in the conduct of their research. The successful candidate will be willing to work with a diverse group of faculty, staff, and students to conduct field and laboratory research. Interested applicants should be prepared to share their Intellectual curiosity and demonstrate their motivation and desire to learn on the-job. Additional desirable qualifications that applicants can address in the letter of interest include experience in computational fluid dynamics, programming, strong problem-solving skills, ability and self-motivation to work independently while accomplishing high quality tasks in a timely fashion.

Responsibilities

The PhD student will perform 20 hrs/week of research towards their PhD thesis along with enrolling in at least 6 credit hours per semester. The research will be directed towards computational fluid dynamics on high-performance computational cluster as well as reduced-dimensional modeling and uncertainty quantification for high-fidelity CFD. The students will work collaboratively with other faculty at UTSI in experimental hypersonic research.

This project presents unique opportunities to learn from diverse curricular offerings from rapidly growing hypersonic research portfolio at UTSI and benefit from the multidisciplinary, and varied professional experience of their faculty. Other opportunities exist for engagement in teaching, outreach, and travel to professional meetings as well as internship opportunities in government and industry.

The position is available starting Spring Semester 2021. Screening of applications will begin immediately and continue until the position is filled. Applications received before November 15, 2020 will receive full consideration.

Interested candidates are invited to apply online, where they will be prompted to provide a detailed CV, names and contact information for three academic references, and details about their personal statement of interest, and professional acumen). Applicants will need to take the GRE. For additional information about this opportunity, inquiries may be directed via email to **Prof. Ragini Acharya** at (ragini.acharya@utsi.edu).