



Research Position Available in Computational Fluid Dynamics and Heat Transfer

The Ohio State University Simulation Innovation and Modeling Center (SIMCenter) is seeking highly-motivated researchers to join our organization at all levels of experience. Applicants are expected to have experience applying computational methods to solve applied problems; working with industry; writing reports, presentations, technical publications, and proposals; and presenting technical material to sponsors or at conferences. These positions are expected to be two-year appointments. Successful candidates will be considered for long-term employment within SIMCenter or with academic departments.

Required Skills:

The position requires a PhD and experience with the following areas:

- Expertise in the area of fluid dynamics and heat transfer
- Expertise with CFD modeling software ANSYS FLUENT or StarCCM+, OpenFoam, and Linux/Unix is highly desirable
- Familiarity with acoustic modeling and simulation using ANSYS Fluent or StarCCM+
- Experience with meshing and preprocessing software such as ANSA or Hypermesh
- Experience with CATIA or SolidWorks to generate/modify assembly models and import the geometry to CFD applications
- Working knowledge of C++, Python and other programming languages/software such as Matlab and/or Mathcad, Labview
- Experience in multi-physics modeling of problems involving fluid flow and heat transfer in engineering and manufacturing processes

About SIMCenter:

The Simulation Innovation and Modeling Center, or SIMCenter, is a newly formed interdisciplinary research center for the virtual simulation and modeling of product performance and manufacturing processes in the College of Engineering. The SIMCenter researches and applies computer-aided engineering techniques to the design and manufacturing of advanced product and production concepts. Located in Smith Laboratory, the SIMCenter combines expertise from several College of Engineering departments, including mechanical, aerospace, electrical, industrial, materials science, computer science, and Integrated Systems and partnership with Ohio Supercomputer Center.

Detailed Job Description:

- Conducts applied and fundamental research in computational fluid dynamics, computational aeroacoustics and heat transfer
- Develops and maintains competency in commercial computational fluid dynamics software packages
- Trains students and staff on the appropriate usage of simulation packages
- Assists in the development of sponsor reports, research articles and presentations
- Assists in the development of research proposals and problem solving tasks

For More Information:

Send a cover letter and CV to simcenter@osu.edu with "Computational Fluid Dynamics and Heat Transfer" as the subject. First consideration of applications will begin on July 20, 2014. Anticipated start date is August of 2014.