THE OHIO STATE UNIVERSITY

College of Engineering

Simulation Innovation and Modeling Center

Smith Laboratory
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SIMCenter.osu.edu

Research Position Available in Engine Simulation

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. The position is expected to be a two-year appointment. 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:

- Modeling of engine gas flows using 1-D and 3-D techniques
- Modeling of engine combustion using 0-D through 3-D techniques
- Experience using 1-D engine simulation packages, such as AVL Boost
- Experience using engine-specific 3-D CFD packages, such as AVL-FIRE
- Experience using general purpose 3-D CFD packages, such as ANSYS-Fluent
- Experimental experience with engines is desired

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 fundamental research in computational engineering
- Conducts applied research in computational engineering
- Develops and maintains competency in commercial computational software packages
- Trains students and staff on the use of computational software packages
- Assists in the development of reports, research articles, and presentations for publication and for research sponsors
- Assists in the development of research proposals

For More Information:

Send a cover letter and CV to simcenter@osu.edu with "Engine Simulation" as the subject. First consideration of applications will being on July 20, 2014. Anticipated start date is August of 2014.