

Postdoctoral Fellow – Computational Fluid Dynamics

Applications are invited for a Postdoctoral Fellow in the Department of Mechanical Engineering at the University of Memphis in the area of computational fluid dynamics with applications to cavitation and multi-phase flows. The candidate will have the opportunity to work in a large collaborative study on cavitation erosion with NSWC Carderock Division and the University of Michigan. The research effort is funded by the Office of Naval Research to conduct experimental cavitation erosion studies and complementary high-fidelity numerical simulations to better understand, predict, and address cavitation erosion. The team will employ facilities that range from the model scale to full scale tests in the US Navy's William B. Morgan Large Cavitation Channel. The successful applicant will have a strong background in computational fluid dynamics and turbulence, experience working with experimental measurements, and desire to work with and assist undergraduate and graduate students. Experience with prior software experience in large-scale parallel code development, machine learning, MPI, C/C++, and Python programming is desirable. This is a 12-month research position in the Department of Mechanical Engineering in Dr. Daniel Foti's research lab in computational science and fluid dynamics. Further appointment will be contingent upon performance and availability of funding. Send any questions about the position to Dr. Daniel Foti at dvfoti@memphis.edu

Required Qualifications

- Ph.D. in mechanical, aerospace, naval engineering or another relevant field
- A strong academic record as evidenced by relevant course work, publications in peer-reviewed journals and/or conference papers
- Excellent written and oral communication skills
- Currently authorized to work in the United States at the time of employment

Applications are to be submitted via <https://workforum.memphis.edu>. Click on the faculty box to find the posting for the Post-Doctoral position in Mechanical Engineering. Applications must include a single PDF document which includes a cover letter with areas of research interest that align with this position; CV with list of publications; and names and contact information for three references. Review of candidates will begin immediately and continue until the position is filled.

The University of Memphis is a Carnegie R1 institution with very high research activity.

The University of Memphis is an Equal Opportunity/Affirmative Action employer. We urge all qualified applicants to apply for this position. Appointment will be based on qualifications as they relate to position requirements without regard to race, color, national origin, religion, sex, age, creed, sexual orientation, gender identity/expression, genetic information, disability, veteran status or any other legally protected class.