Postdoc fellow in mechanical design and digital manufacturing
University of Connecticut

Job Title	Postdoc fellow in mechanical design and digital manufacturing
Department	Mechanical Engineering
Institution	University of Connecticut Storrs, Connecticut
Date Posted	Aug. 2, 2025
Application Deadline	Aug. 24, 2025
Position Start Date	Available immediately
Job Categories	Post-Doc
Academic Field(s)	Robotics Mechanical Engineering
Apply By Email	

Job Description

Job Title: Postdoctoral Fellow

School of Mechanical, Aerospace, and Manufacturing Engineering, University of Connecticut

Supervisor: Hongyi Xu, Associate Professor (effective 8/23/2025)

Position description

A Postdoctoral Fellow position is available at the Computational Engineering and Design (CEaD) Laboratory in the School of Mechanical, Aerospace, and Manufacturing Engineering, University of Connecticut. The postdoctoral fellow will work with Dr. Hongyi Xu on one or more of the following research topics: (1) generative design of architectured materials, (2) generative AI-assisted manufacturing process modeling and uncertainty quantification, and (3) resilient cyber manufacturing systems. Please submit your CV and names of at least two references to hongyi.3.xu@uconn.edu. At

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least one reference should be in your current institution.

Essential functions

1. Develop computational design methods and deep learning models
2. Set up experiments and conduct tests as needed
3. Publish peer-reviewed journal papers and attend conferences to disseminate research
4. Assist the PI to advise graduate and undergraduate students

Qualifications

1. PhD in mechanical engineering, computational mechanics, robotics, or related fields
2. Research experience in artificial intelligence and engineering design
3. Experience in FEA and/or multiphysics simulation
4. Experience in topology optimization is a plus
5. Experience in manufacturing process control is a plus
6. A green card is not required; however, green card holders may have a higher chance of securing multi-year funding for this position.

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact Hongyi Xu
University of Connecticut
Storrs, CT 06269