Research Assistant for Collective Dynamics Lab

Duke Kunshan University

Job Description

Position Overview:

The Collective Dynamics Lab (CDL) at Duke Kunshan University (DKU) is seeking applicants with background in soft condensed matter physics to engage in research collaboration between Duke Kunshan University in China and University of Bayreuth in Germany.

The newly established CDL aims at understanding, predicting and controlling the collective behavior of granular materials by means of lab experiments and numerical simulations, in order to shed light on a wide range of applications: From the prediction of natural disasters to in geoscience to the enhancement of energy efficiency in industries. For more info, please visit: http://www.staff.uni-bayreuth.de/~bt170950/index.html.

DKU is a partnership of Duke University, Wuhan University and the Municipality of Kunshan, China. The campus is located 37 miles west of Shanghai in Kunshan, which is connected to Shanghai via a 20-minute high-speed train. DKU currently offers graduate and undergraduate programs. For more info, please visit http://www.dukekunshan.edu.cn.

The Research Assistant (RA) will perform research on various projects supervised by Dr. Kai Huang and assist in the development of CDL. Upon mutual agreement and the approval of the graduation committee, the RA has the opportunity to be enrolled in the PhD program at the University of Bayreuth in Germany. Consequently, short term research stay in Germany is expected.

Reports to:

Dr. habil. Kai Huang, Associate Professor of Physics

Essential Duties:

- Support in building and maintaining the daily operation of CDL.
- Perform research and development on research projects in CDL.
- Facilitate research collaborations (arrange visits, seminars, etc.) with other groups.
- Assist in training undergraduate students.

- Perform other duties as assigned.
- The university employee's job responsibilities will continue to expand in scope and depth as the university grows in size and complexity in its programs.

Required Qualifications:

- Master's degree in physics, mechanical engineering or other related fields.
- Good English communication skills, both verbal and written.
- Solid experience in experimental set-up design and realization, image analysis, data handling.
- Software skills in one or more of the following: C++, Matlab, and Python.
- Research experience in phase transitions, complex fluids, nonlinear dynamics or statistical mechanics is a plus, but not a prerequisite.

How to Apply:

Please submit English resume and cover letter with the subject line of "Research Assistant for CDL Application" to DKUrecruitment@dukekunshan.edu.cn and kai.huang186@dukekunshan.edu.cn. This post is valid through Oct.1, or till the position is filled. Interested candidates are encouraged to apply as soon as possible.