Research Associate Position in Computational Mathematics

https://www.mathjobs.org/jobs/jobs/11019

The Mathematics Department in the College of Natural Sciences and Mathematics at the University of Houston invites applications for a Research Associate to conduct research in an area compatible with the current research interests of the Mathematics Department. The position will be for two years, with the possibility of a one year renewal. For this position, we are especially interested in a candidate that has a strong track record in one or more of the following areas of research:

- Variational problems, particularly, 3D shape optimization or diffeomorphic image registration; non-linear control of shape deformations.
- PDE-constrained optimization and optimal control, particularly, fitting complex dynamic models to biomedical image sequences.
- Computational inverse problems for biomedical applications, particularly, Bayesian inversion and uncertainty quantification.
- Large-scale data analytics based on machine learning techniques.

As indicated above, the planned area of application includes (but is not limited to) computational medicine, in particular the analysis of sequences of 3D biomedical images. Having a strong background in (parallel) scientific computing, high-performance computing, and C/C++ programming is a plus. The ideal candidate will have a strong research track record in one or more of the areas mentioned above.

Job requirements include a Ph.D. degree in Applied Mathematics with strong computational skills, and 2 years of experience. The position may involve teaching up to one course per semester.

Applicants should provide (i) a resume including a recent list of publications and ideally a verifiable list of programming skills (e.g., GitHub repositories), (ii) a cover letter/letter of application, (iii) a brief statement of research (detailing the significance of current research activities as well as the technical background that fits the advertised position), (iv) at least two letters of recommendation, and (v) unofficial transcripts. In order to ensure full consideration, candidates should apply at MathJobs (https://www.mathjobs.org/jobs/jobs/11019), as well as via our internal system (https://uhs.taleo.net/careersection/ex1_uhs/jobdetail.ftl?job=STA001750&tz=GMT-05%3A00).

The University of Houston is one of the most diverse research universities in the nation. It is an Equal Opportunity/Affirmative Action employer. Minorities, women, veterans and persons with disabilities are encouraged to apply. The University of Houston is the recipient of a National Science Foundation ADVANCE Institutional Transformation Award and is committed to increasing the participation of women in academic science and engineering careers.

Review of applications will begin soon and will continue until the position is filled. Inquiries about the application or position may be directed to andreas@math.uh.edu.