

DARTMOUTH COLLEGE

Postdoctoral Position in Developing Compressive Sensing Methods for Distributed Data

The Department of Mathematics at Dartmouth College invites applications for a postdoctoral appointment with start date August 1, 2025, although earlier start dates are possible. The postdoctoral fellow will join a research team on a current project sponsored by the Department of Energy entitled Infrastructure and Application Aware Reduction Methods for Scientific Data. The position is intended for two to three years, with an initial one-year appointment renewable contingent upon performance and subject to budgetary approval.

Eligibility requires completion of the PhD in mathematical sciences, engineering, or a closely related field before start date. The ideal candidate should have a solid background in numerical computation, with expertise in some area related to the project, for example, compressive sensing, statistical machine learning, data assimilation, computational inverse problems, uncertainty quantification, signal and image recovery, and registration. It is also beneficial to have some understanding of data acquisition technologies such as x-ray light and neutron sources. While expertise in all of these areas is not expected, programming expertise is essential. A main goal of this project is to develop compressive sensing methods for data reduction on distributed data in scientific ecosystems. Successful applicants are expected to be no more than 3 years past their doctorate.

The post-doctoral appointee may have the opportunity to teach one or two ten-week courses; contingent on course availability in the Mathematics Department and teaching qualifications. Salary will be adjusted accordingly and set by the Associate Dean of the Arts and Sciences Division.

Located in Hanover, New Hampshire, Dartmouth College is an Ivy League university that offe rs students, postdoctoral scholars, and faculty a close-knit academic community with global reach. Part of the Faculty of Arts and Sciences, the Department of Mathematics has 24 tenured and tenure-track faculty members, a strong PhD program, and outstanding undergraduate majors. Members of the department have collaborative connections across campus. In addition, postdoctoral scholars and graduate students are supported by the Guarini School for Graduate and Advanced Studies, including their diversity and inclusion initiatives. A complete list of all current openings in Mathematics can be found on our website: http://math.dartmouth.edu/activities/recruiting/.

Dartmouth is committed to academic excellence and encourages the open exchange of ideas within a culture of mutual respect. People with different backgrounds, life experiences, and perspectives make the Dartmouth community diverse, which enhances academic excellence. In addition, we value applicants who have a demonstrated ability to contribute to Dartmouth's undergraduate diversity initiatives in STEM research, such as the Women in Science Program, E.E. Just STEM Scholars Program, and Academic Summer Undergraduate Research Experience (ASURE). Applicants should include a statement that addresses how their research, teaching, service, and/or life experiences prepare them to advance Dartmouth's commitment to diversity in service of academic excellence.

Applicants should submit the following via Math]obs:

- 1. Cover letter,
- 2. Curriculum vitae,
- 3. Statement of research experience, plans and interests,
- 4. Statement of pedagogical experience and interests,
- 5. Statement that addresses how the applicant's research, teaching, service, and/or life experiences prepare them to advance Dartmouth's commitment to diversity in service of academic excellence; and
- 6. At least three letters of recommendation. At least one reference should address the applicant's ability as a teacher and, if the applicant's native language is not English, the applicant's ability to use English in the classroom. At least two references should address the applicant's research ability.

To initiate an application, go to www.mathjobs.org — Position ID# COMPINVPROB 25309 and fill out the required application form online. The position will remain open until filled; applications completed by December 1, 2024, will receive first consideration. General inquiries can be sent to Tracy Moloney, tfmoloney@math.dartmouth.edu, Department of Mathematics, Dartmouth College, 6188 Kemeny Hall, Hanover, New Hampshire 03755-3551. Specific questions on the selection process can be referred to Professor Anne Gelb (annegelb@math.dartmouth.edu)).

Equal Employment Opportunity Statement

Dartmouth College is an equal opportunity/affirmative action employer with a strong commitment to diversity and inclusion. We prohibit discrimination on the basis of sex, race, color, religion, age, disability, status as a veteran, national or ethnic origin, sexual orientation, gender identity, gender expression, or any other category protected by applicable law, in the administration of its educational policies, admission policies, scholarship and loan programs, employment, or other school administered programs. Applications by members of all underrepresented groups are encouraged.

If you are an applicant with a disability and need accommodations to assist in the job application or interview process, please email ADA@dartmouth.edu. In the subject line, please state "Application Accommodations" and include the job number or title. Someone from the ADA Compliance Office will be in touch within 2 business days.

For additional employment opportunities at Dartmouth College, please visit the Dartmouth Interfolio Job Board, the Office of the Provost, and the Office of Human Resources.

Offers of employment are contingent upon consent to a pre-employment background check with results acceptable under Dartmouth policy. Please visit the Office of Human Resources for details.

All Dartmouth College employees must comply with the College's health and safety guidelines and protocols, including but not limited to those related to COVID-19, such as any testing, masking, or distancing requirements that may be in place at any given time or place.