

Virginia Tech Department of Mathematics Faculty Positions in Mathematics of Data and High Performance Computational Mathematics

The Virginia Tech Department of Mathematics anticipates two tenure-track openings in Mathematics of Data and High Performance Computational Mathematics with a start date of August 10, 2023, at our Blacksburg, VA, campus. The successful candidate will have a strong background in mathematics of data, high performance computing, or their intersection. Possible specialties include, but are not limited to, algorithms for large-scale data, reduced-order data-driven modeling, model order reduction, numerical linear algebra, randomized numerical linear algebra, tensor computations, inverse problems, numerical PDE modeling, PDE solvers, machine learning, optimization, or uncertainty quantification. Application areas of interest include, but are not limited to, geosciences, neuroscience, physics, biology, chemistry, or economics.

Appointment as an Assistant Professor of Mathematics is anticipated, but exceptional senior candidates will be considered for positions of Associate Professor of Mathematics or Professor of Mathematics. Teaching and service duties will be split between the Mathematics Department and the Computational Modeling and Data Analytics (CMDA) program. The CMDA program is a collaborative effort involving faculty members from several departments, located in the College of Science's Academy of Data Science (<https://data.science.vt.edu>). The recently established Academy of Data Science embodies Virginia Tech's commitment to its land-grant mission of using leadership in teaching, research, and service to address society's pressing problems.

Job requirements include a Ph.D. in mathematics or a related field at the time of appointment and an active research program (or for new Ph.D.'s, strong promise for developing an active research program) in mathematics of data, high performance computing, or their intersection. Position will require occasional travel to conferences and meetings. The successful candidate will be expected to establish a distinguished research program and to provide effective instruction and advising to a diverse population of undergraduate and graduate students. Additional responsibilities include: continuing development of professional capabilities and scholarly activities, including travel to professional meetings; curriculum development, in particular enhancing the computing aspects of the Mathematics and CMDA curricula; participation in department, college, and university governance; and professional service.

The Mathematics Department is committed to building an inclusive community of mathematical scientists through programs and activities that are woven into the department's research, teaching, and outreach efforts. Our commitment is illustrated by programs such as our: Broadening Engagement and Participation in Undergraduate Research; Mathematics: Opportunities in Research and Education; and professional development activities organized by the Virginia Tech Chapter of the Association for Women in Mathematics, winner of the 2021 AWM Student Chapter Award for Scientific Excellence. Through undergraduates' supervised tutoring of local public school students and through the department's participation in the Commonwealth Cyber Initiative, the Mathematics Department introduces secondary school and community college students to opportunities in the mathematical sciences. The diversity statement required in our application process gives candidates opportunities to bring to our attention their qualifications for and interest in contributing to efforts to diversify our discipline. Strong statements will demonstrate informed awareness of the rewards and challenges arising from efforts to provide equitable

opportunities for all. Specific examples of experiences, activities, and plans will help us identify candidates who can support and extend our department's commitment to inclusive excellence.

An online application is required. To apply, please visit www.jobs.vt.edu, select "Apply Now," and search by posting number 521837. Please include a cover letter, a CV, a research statement, a teaching statement, and a diversity statement as part of the online application. Each applicant should follow the instructions in the online application system to request that four references submit letters of recommendation, or letters can be emailed to compmath22@math.vt.edu. Additional information about position requirements and responsibilities can be found at the following websites: <http://www.hr.vt.edu> and <https://www.math.vt.edu>. The faculty handbook (at <https://faculty.vt.edu/faculty-handbook.html>) gives a complete description of faculty responsibilities. The successful candidate will be required to have a criminal conviction check. Questions about the search may be addressed to compmath22@math.vt.edu.

Applications received by November 1, 2022, will receive full consideration.

Virginia Tech is committed to supporting the success of its faculty members through policies that include the modification of duties, the extension of tenure clocks, mentoring, proposal-writing guidance, and dual-career accommodations, depending on individual circumstances. Interviewed candidates will meet with a work-life liaison for a confidential conversation about details of these policies.

Virginia Tech does not discriminate against employees, students, or applicants on the basis of age, color, disability, sex (including pregnancy), gender, gender identity, gender expression, genetic information, national origin, political affiliation, race, religion, sexual orientation, or veteran status, or otherwise discriminate against employees or applicants who inquire about, discuss, or disclose their compensation or the compensation of other employees or applicants, or on any other basis protected by law.

For inquiries regarding non-discrimination policies, contact the Office for Equity and Accessibility at 540-231-2010 or Virginia Tech, North End Center, Suite 2300 (0318), 300 Turner St. NW, Blacksburg, VA 24061.

Individuals with disabilities desiring accommodations in the application process should notify Mr. Kevin Kish (kevink96@vt.edu, 540-231-6536) or call TTY 1-800- 828-1120 by November 1, 2022.