

Duke University Energy Data Analytics Ph.D. Fellows Program

Call for Proposals

The growth of energy-related data in the last decade has created new opportunities for data-driven explorations of energy problems. Capitalizing on the opportunities presented by this new wealth of data will require scholars with training in both data science and energy application domains. Recognizing this—and the fact that traditional graduate training is limited in its ability to provide such dual expertise—this PhD fellows program aims to train a cohort of next-generation scholars who, working with faculty from multiple disciplines, will draw on knowledge in energy application areas (e.g., energy technologies, systems, markets, and policies), and data science methods (e.g., statistics, machine learning, and other computational methods, especially as applied to “big data”). This work can span many disciplinary fields (including engineering, operations research, computer science, mathematics, environmental science, economics, public policy, or closely related fields) to leverage burgeoning sources of energy data to affect the evolution of energy systems and the policies that govern them.

Benefits to successful applicants

- Funding equivalent to 50% support for two semesters (for a total of one semester of funding).
- Conference travel support and data acquisition support up to \$2,000.
- Priority access to virtual machines, storage, and other computational resources.
- Participation in an Energy Data Analytics symposium in Spring, 2020.

Student Eligibility

- a. Any Duke doctoral student currently enrolled full time. The student must be working with (or proposing to work with) two faculty members representing interdisciplinary expertise across both an energy application domain and a data science field as defined above.
- b. Doctoral student must show evidence of genuine interest in research on important energy data analytics topics that play a role in their larger dissertation objectives.
- c. Applicants must be making successful academic progress in their home department.
- d. Doctoral students as early as their second year at Duke can apply to be an Energy Data Analytics Fellow during the next academic year. Preference will be given to students who have completed coursework by the beginning of their fellowship term.

Fellowship Duration

Energy Data Analytics Fellows are expected to work on their proposed project for a minimum of one academic year (9 months). Preference will be given to students who incorporate the proposed project into their dissertation research. The fellowship will begin at the start of the fall semester (September 1) and end the following spring (May 31).

Application Deadline

The deadline for application submission is March 1, 2019. The Energy Data Analytics Fellows application can be found at <https://energy.duke.edu/energy-data-analytics-phd-student-fellows> and should be submitted as a pdf document to Kyle Bradbury (kyle.bradbury@duke.edu) no later than 11:59pm on the day of the deadline.

Questions

Please contact Kyle Bradbury (kyle.bradbury@duke.edu) with any questions about this program.

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Note: Conclusions reached or positions taken by researchers or other grantees represent the views of the grantees themselves and not those of the Alfred P. Sloan Foundation or its trustees, officers, or staff.