In an increasingly data-centric world, electronic information has become a critical element in modern research, education, medicine, and business. The Data Science Initiative will bring together faculty from a broad range of schools across campus to explore overlapping interests in the area of data science, including methodology, theory, policy, and education.

Professor Padhraic Smyth
Initiative Director

What Is Data Science?

Data science is a term that is used to describe a broad range of theories, algorithms, methodologies, and tools that allow us to better understand and make predictions about the world around us. Among the topics included under the umbrella of data science are:

- Theories and algorithms from statistics and machine learning for making predictions from data;
- Data management techniques for efficiently organizing and accessing large and complex data sets;
- The human aspect of data, including human-computer-interaction, privacy, social policy, and more; and
- Data-driven projects across the sciences, humanities, medicine, engineering, business, and education that utilize theories and methods from data science to make domain-specific advances, as well as open up broad new research questions for data scientists.

The UCI Data Science Initiative

The Data Science Initiative at the University of California, Irvine is coordinating the activities of researchers and students across campus involved in various aspects of data science. The Initiative, started in July 2014, is focused on a number of specific activities in its first year, including:

- Graduate education in data science, including short courses on topics such as data analysis software, data management, and predictive modeling;
- Pursuing new undergraduate opportunities related to data science, including a proposal for a new Data Science major at UCI;
- Organizing mini-symposia on emerging interdisciplinary research topics that have significant data-driven components; and
- Additional activities such as supporting faculty in writing large multi-investigator grants in the data science area.

Academic Initiatives at UCI

The Data Science Initiative is one of the initiatives sponsored by UCI’s Office of the Provost and Executive Vice Chancellor through the Office of Academic Initiatives.

Questions?
Padhraic Smyth
Data Science Initiative Director
(949) 824-2558
data science@uci.edu

datascience.uci.edu
Faculty Advisory Board

Anima Anandkumar
Electrical Engineering & Computer Science

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