UNIVERSITY OF DELAWARE
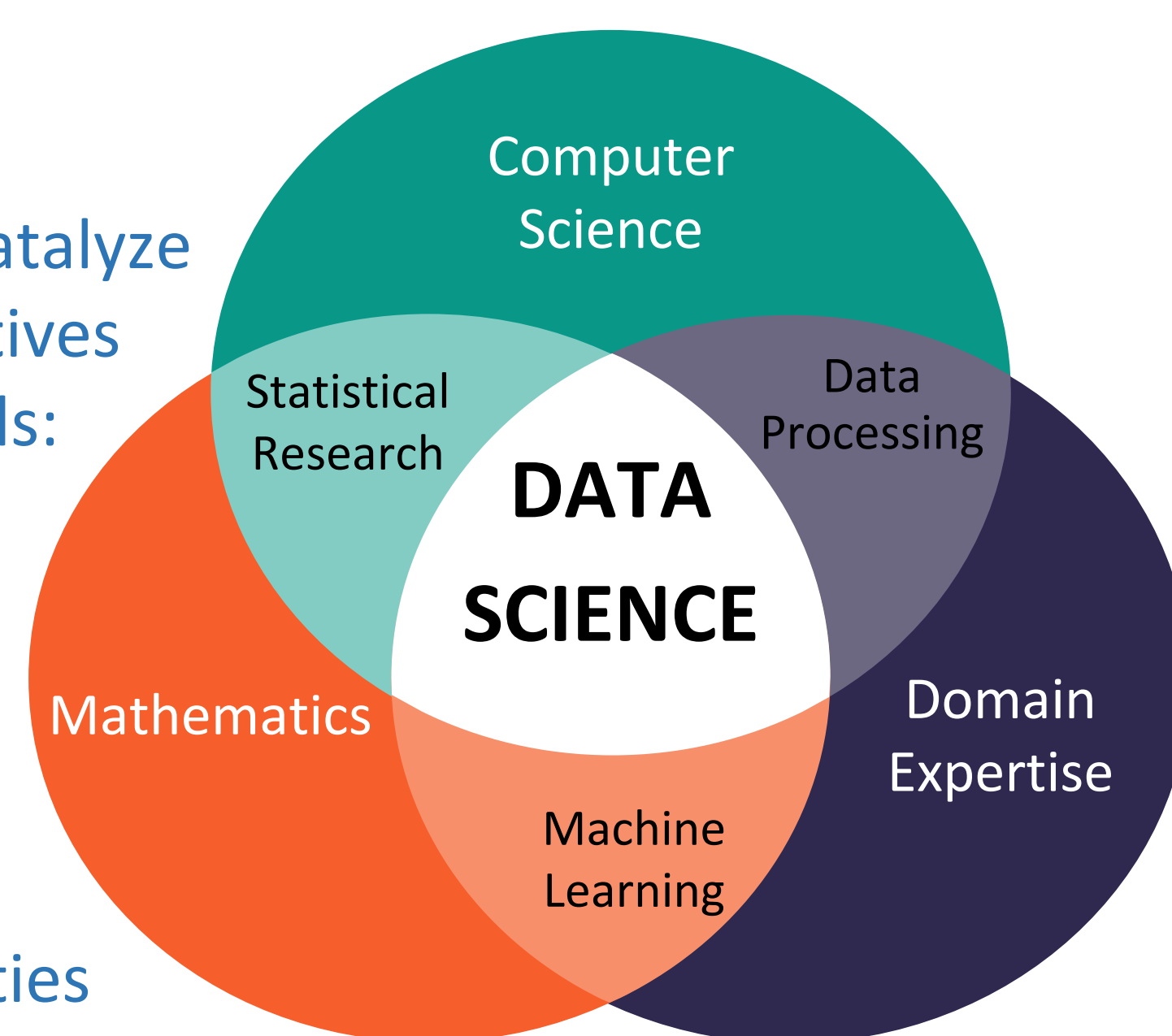# DATA SCIENCE INSTITUTE

**https://dsi.udel.edu**

## Mission

The **Data Science Institute (DSI)** aims to accelerate research in data science, serving as a nucleating effort to catalyze interdisciplinary research collaborations across fields impacting our society.

Serving as a hub for interdisciplinary research, collaboration and excellence, the DSI brings together faculty and students from seven colleges across campus to work effectively with big data and address problems and opportunities facing society—**from health sciences, physical sciences, environmental sciences, to behavioral and social sciences and public policy**. The Institute will further involve partnerships with industry and other institutions in the region.

## Goals

Serving as a **nucleating effort** to catalyze and coordinate data science initiatives at UD, with the following core goals:

- Coalesce researchers around data science research themes and develop competitive research programs
- Engage students in data science research and training opportunities
- Collaborate with government and industry partners
- Support Data Intensive & Computational Science Core

*(Venn diagram: Computer Science, Statistical Research, Data Processing, Mathematics, Machine Learning, Domain Expertise — centered on **DATA SCIENCE**)*

## Educational Programs at UD

**Bioinformatics Data Science | Economics | Statistics
Cybersecurity | Data Science | Epidemiology
Geospatial Data Science | Materials Data Science
Educational Statistics | Electrical & Computer Engineering
Business, Info. Management & Financial Services Analytics
Neuroscience | Urban Data Science | Hospitality**

## DSI Student Association and DSI Fellows

Students engage via the Data Science Student Association and DSI Fellows. The Data Science Student Association is a newly established student group open to all students interested in Data Science.

DSI Fellows are graduate students and postdocs who serve as student leaders to help drive data science initiatives and student hosted events such as the Data Science Community Hour and the Data Science Student Symposium.

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## Faculty Council

The Faculty Council engages with leading Data Science researchers and program representatives in order to drive the DSI's mission and guide DSI operations through four Working Groups.

**Director** — Cathy Wu
**Assoc. Director** — Benjamin Bagozzi
**Assoc. Director** — John Gizis

| Member | College | Department |
| --- | --- | --- |
| Ali, Saleem | CEOE | Geography & Spatial Sciences |
| Buler, Jeffrey | CANR | Entomology & Wildlife Ecology |
| Chandrasekaran, Sunita | COE | Computer & Information Sciences |
| Chen, Bintong | CBE | Business Administration |
| Conaty-Buck, Susan | CHS | School of Nursing |
| Davey, Adam | CHS | Behavioral Health and Nutrition |
| Ding, Shanshan | CANR | Applied Economics & Statistics |
| Dinh, Vu | CAS | Mathematical Sciences |
| Dobler, Gregory | Biden | School of Public Policy & Administration |
| Eigenmann, Rudolf | COE | Electrical & Computer Engineering |
| Fang, Xiao | CBE | Management Information Systems |
| Fleischhacker, Adam | CBE | Operations Management |
| Horney, Jennifer | CHS | Epidemiology |
| Jayaraman, Arthi | COE | Chemical & Biomolecular Engineering |
| Karpyn, Allison | CEHD | Human Development & Family Sciences |
| May, Henry | CEHD | School of Education |
| Powers, Thomas | CAS | Philosophy |
| Trembanis, Art | CEOE | School of Marine Science and Policy |
| Vargas, Rodrigo | CANR | Plant and Soil Sciences |

## Resident Faculty

**Strategic faculty hiring across and within colleges** in both foundational and applications areas of data science, to complement current strengths of 140+ DSI-affiliated faculty.

Barmaki (COE) · Beheshti (COE) · Bianco (CAS) · Brockmeier (COE) · Davis (CEOE) · Dobler (Biden) · Gao (CEOE)

Hong (COE) · McCormick (CEHD) · Mondal (CEOE) · Peng (COE) · Shen (CANR) · Student (CEHD) · Zhao (CANR)

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## Research Working Group

Foster the development of multidisciplinary research collaborations and competitive grant submissions, including large team-based funding competitions and grants engaging government and industry partners

**Research WG Co-Chairs**
Cathy Wu · Benjamin Bagozzi

## Infrastructure Working Group

Identify, procure, and help manage data and compute infrastructure, supporting data science and the Data intensive & Computational Science (DiCoS) Core. Combining sophisticated hardware assets with highly skilled technical expertise, DiCoS works with researchers to carry out advanced scientific studies and support interdisciplinary research collaborations.

**Infrastructure WG Co-Chairs**
John Huffman · Sunita Chandrasekaran

## Training Working Group

Support research by facilitating training and interdisciplinary opportunities
- Create training opportunities for interdisciplinary groups
- Leverage existing resources
- Support development of sponsored training grants

**Training WG Co-Chairs**
Susan Conaty-Buck · Karen Hoober

## Networking & External Relations Working Group

- Establish the Data Science Distinguished Lecture Series & co-sponsor lectures
- Host and co-sponsor training workshops and networking events
  - Promote visibility and engagement via local and national media and social media
  - Engage industry & government partners
  - Host meetings, seminars & brownbag lunches to share research, incubate ideas, and promote networking among faculty, students, and partners

**Networking & External Relations WG Co-Chairs**
Henry May · John Gizis

**Industry Liaison**
Michael Blaustein

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