



## Mission

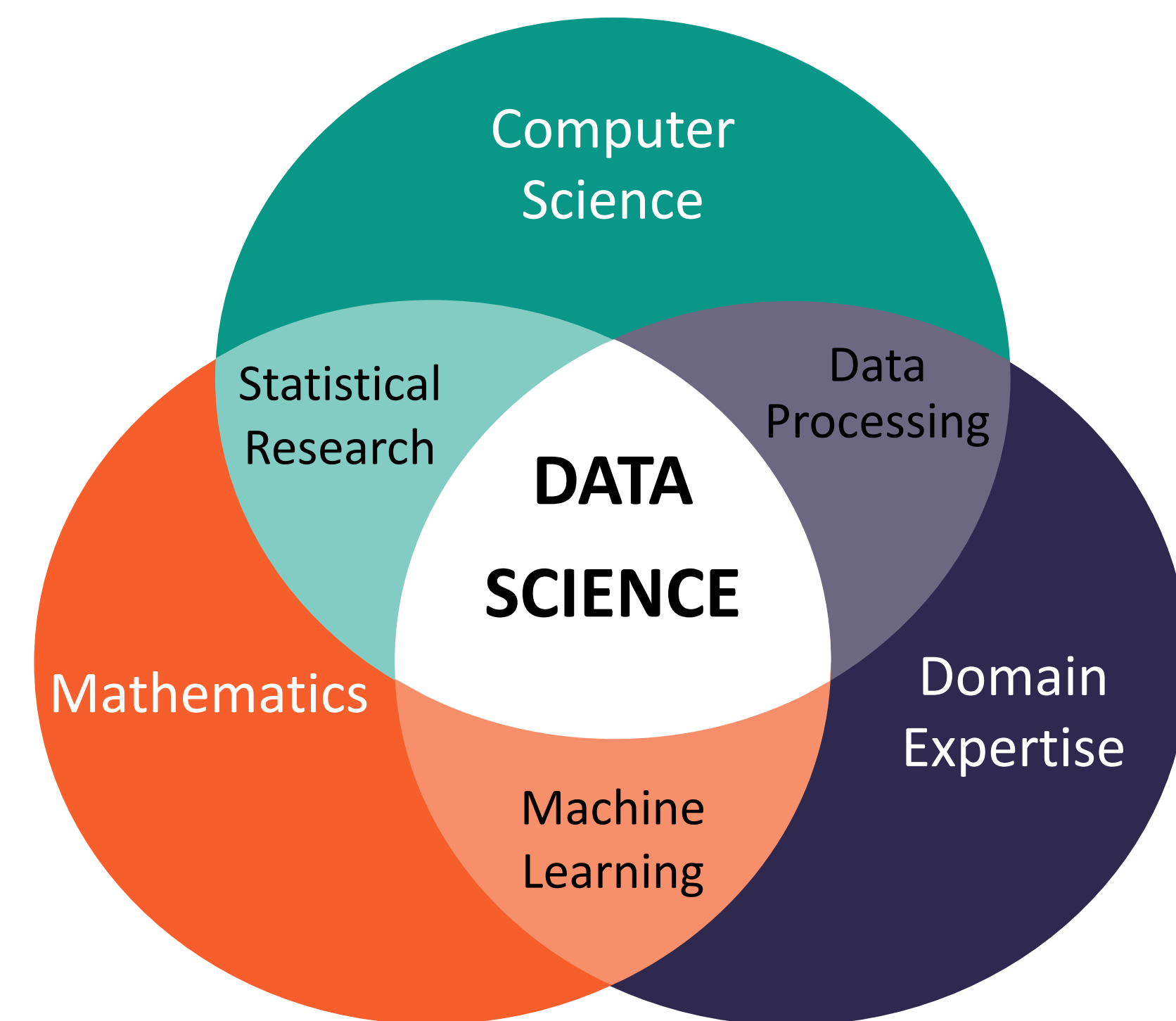
The **Data Science Institute (DSI)** aims to accelerate research in data science, serving as a nucleating effort to catalyze interdisciplinary research collaborations across fields impacting our society.

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

- 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



## Educational Programs at UD

**Bioinformatics | Business Analytics | Cybersecurity**  
**Data Science | Statistics | Epidemiology**  
**GIScience and Environmental Data Analytics**

## Data intensive & Computational Science (DiCoS) Core

The DiCoS Core aims to develop shared resources and scientific expertise to support data science and computational research across the UD campus, leveraging available resources and capabilities at UD and collaborating closely with the UD Information Technologies Office. Combining sophisticated hardware assets with highly skilled technical expertise, DiCoS will work with users to carry out advanced scientific studies and support interdisciplinary research collaborations. Major core capabilities and activities are:

- Core access awards for Caviness HPC Cluster
- Core access awards for DARWIN Storage and Compute Cluster
- Inventory of datasets created and used at UD in data science
- Expert assistance with data science related research and grant applications as a service or as a collaborator

### Infrastructure – Core Facility



*“UD’s Data Science Institute is an exciting hub for interdisciplinary research, collaboration and excellence”*

— UD President Dennis Assanis

## Faculty Council

Leading Data Science researchers and program representatives to drive DSI mission and guide DSI operations with four Working Groups

DSI Director



Dr. Cathy Wu

| Member               | College | Department                               |
|----------------------|---------|--|
| Attoh-Okine, Nii     | COE     | Civil & Environmental Engineering        |
| Conaty-Buck, Susan   | CHS     | School of Nursing                        |
| Ding, Shanshan       | CANR    | Applied Economics & Statistics           |
| Dobler, Gregory      | CAS     | School of Public Policy & Administration |
| Eigenmann, Rudolf    | COE     | Electrical & Computer Engineering        |
| Fang, Xiao           | CBE     | Management Information Systems           |
| Gizis, John          | CAS     | Physics & Astronomy                      |
| Jeka, John           | CHS     | Kinesiology & Applied Physiology         |
| Leathers, Dan        | CEOE    | Geography                                |
| May, Henry           | CEHD    | School of Education                      |
| O'Neal, Michael      | CEOE    | Geological Sciences                      |
| Rossi, Louis         | CAS     | Mathematics                              |
| Wu, Cathy (Director) | COE     | Computer & Information Sciences          |
| Vargas, Rodrigo      | CANR    | Plant and Soil Sciences                  |
| Vlachos, Dion        | COE     | Chemical & Biomolecular Engineering      |

## Resident Faculty

Strategic faculty hiring across and within colleges in both foundational and applications areas of data science, to complement current strengths of 100+ faculty



## 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

- Identify targeted funding opportunities
- Develop research seed grant mechanisms
- Co-host research symposia in priority areas
- Drive research initiatives and team science

Research WG Chair



John Jeka

## Infrastructure Working Group

Identify, procure, and help manage data and compute infrastructure in support of data science and setup and support the DiCoS Core

Infrastructure WG Chair



Rudi Eigenmann

## Training Working Group

Support research by facilitating training and development opportunities

- Create training opportunities for interdisciplinary groups
- Collect and leverage existing resources on and off campus
- Identify and support development of sponsored training grants
- Provide a structured environment for above

Training WG Chair



Lou Rossi

## Networking & External Relations Working Group

- Establish 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 of faculty, students, partners

Networking & External Relations WG Co-Chairs



Henry May



John Gizis