

SCHOOL OF DATA SCIENCE

STRATEGIC PLAN

2022-2027





“Our world is changing, driven by data, in ways as profound as the changes brought about by the agricultural, industrial and computer revolutions. As in the past, such change is disruptive, bringing both challenges and opportunities.”

– Phil Bourne, Stephenson Dean



VISION

Founded as a “School Without Walls,” our vision is to meet today’s challenges and maximize opportunities through:

Research

excellence that is collaborative, open, interdisciplinary, and for the public good.

Education

which produces well-trained, responsible, diverse leaders.

Service

that leads to products and outcomes which provide societal benefit.

VALUES

Core values define our culture and therefore what and how we practice.

Excellence

What we do, we do best.

Inclusivity

We respect people, value diversity, and are committed to equity.

Openness

We are committed to open innovation and transparent teamwork.

Be FAIR

We support the ability to Find, Access, Interoperate, and Reuse data and all other research and education products.

THEMES

Themes are infused throughout the strategic plan and across goals.

Culture

Build and foster an inclusive, collaborative, vibrant, and dynamic community of lifelong learners and engaged, civic-minded leaders.

Process & Systems

Ensure that we use the most productive and efficient processes, procedures, and systems for supporting academic, research, and operational activities.

Communications

Create transparent and effective ways to ensure all community members feel acknowledged, heard, and valued.

Goals and Objectives

The School of Data Science has adopted a five-year strategic plan to be operationalized starting 2022. The plan's five goals and their objectives are to implement, popularize, and evaluate how we approach data science and are implicitly framed – and constrained – by the School's vision, core values, and themes.

1

Set the standard for collaborative and interdisciplinary data science

The School of Data Science is growing quickly, both influencing and absorbing a field that is changing rapidly in ideas, people, and applications. Simultaneously, higher education is under stress and changes are needed. In response to these challenges, the School was founded on the bold proposition that a new institution requires a new organizational model with expectations, values, and approach to culture which differs from what has come before.

2

Implement a sustainable growth plan

The School of Data Science is expected to continue growing and evolving. To sustain operations and growth, the School will have a sustainable growth plan that has the financial and human resources to achieve its mission. The School is expected to remain financially independent and healthy, anticipating operational and financial needs.

3

Pioneer data science scholarship and education

The School of Data Science was established with the goal of offering data science educational programs

for everyone, from K-12 through professional programs. The School plans to launch an undergraduate degree to complement the existing Data Science Minor, the M.S. in Data Science, the Ph.D. in Data Science, and certificate programs. Programs should be offered in-person and online for maximum flexibility to support student success and an inclusive experience.

4

Establish a globally recognized data science research program

There is an opportunity for the School of Data Science to establish itself as a globally recognized data science research program. The School will refine research priorities and align faculty hiring and mentorship accordingly. To strengthen the School's global research footprint, it will focus on major, center-level and multi-institutional awards and improve research administrative support.

5

Champion the use of data science to improve society and serve our communities

The School of Data Science has challenged itself to be a champion of

responsible data science that benefits society. Priorities include: 1) research excellence that is collaborative, open, interdisciplinary and for the public good, 2) education that produces well-trained, responsible, diverse leaders, and 3) service that leads to products and outcomes which provide societal benefit. Underscoring the School's vision is a commitment to diversity, equity, and inclusion that we seek to connect to every aspect of the School, its research and programs, and how we connect with our communities.

A School Without Walls

The University of Virginia School of Data Science — the first of its kind in the nation — is guided by common goals: to further discovery, share knowledge, and make a positive impact on society through collaborative, open, and responsible data science research and education. Founded in fall 2019 through the largest gift in UVA history, the School positions the university and our community to play a national and international leadership role in the global digital future.

1

Set the standard for collaborative and interdisciplinary data science

Objectives

1. Align processes to maintain our core values and foster collaborative and interdisciplinary data science.
2. Develop and maintain interdisciplinary collaborations across the University and beyond.
3. Develop an organizational process for establishing, operating and evaluating Areas, Centers and Collaboratories.
4. Build and foster an inclusive, collaborative, vibrant, and dynamic community.
5. Provide information technology systems, processes, and computing services to support all areas of the School.
6. Establish an internationally-recognized institutional brand and showcase the School's people, place, and programs.

2

Implement a sustainable growth plan

Objectives

1. Establish the means for every team member to grow professionally and succeed in their role.
2. Increase institution's financial visibility, transparency, and communication to empower and enable stakeholders.
3. Maintain a balanced financial portfolio.
4. Create a development strategy and team in conjunction with University Advancement to support institutional mission.
5. Create and maintain a competitive compensation strategy.



Data visualization final presentations

3

Pioneer data science scholarship and education

Objectives

1. Develop, grow, and evolve our top-tier educational programs.
2. Graduate civic-minded and ethically balanced data scientists with strong ties to the School and University.
3. Foster and support nationally visible data science scholars.
4. Create faculty mentor resources and programs.
5. Deliver an exceptional student experience.
6. Develop a presence in Northern Virginia in collaboration with University priorities and directives.



M.S. in Data Science Class of 2021

4

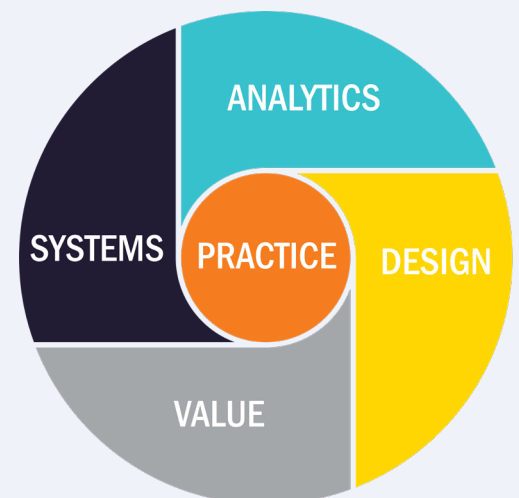
Establish a globally recognized data science research program

Objectives

1. Solidify the research areas where the School of Data Science can have maximum scientific impact.
2. Win major, center-level and multi-institutional awards.
3. Source, recruit, and hire faculty that support institutional research goals.
4. Establish a high-functioning research administration process.
5. Achieve leadership in data science research.
6. Achieve national prominence in responsible data science.

What is Data Science?

Data scientists develop novel mathematical and computational frameworks to extract knowledge from data and generalize findings. While data science is often envisioned as the application of statistical and computational tools to real-world problems, the discipline itself is much broader. At the School of Data Science, we loosely group these activities into the Domains of Data Science — analytics, systems, value, and design — which are all applied to practice.



5

Champion the use of data science to improve society and serve our communities

Objectives

1. Establish the organizational structure to provide service to various communities.
2. Establish targeted outreach and programming activities promoting data science access and pathways localized to the Thomas Jefferson Planning District.
3. Support programs in open knowledge that benefit our communities.
4. Strengthen our relationships with local, state, and federal governments.

Inaugural Data Justice Academy 2022



3 YEAR TIMELINE

SEP. 2019

New School

The State Council of Higher Education for Virginia approves formation of the School of Data Science.

JUN. 2020

Need-Based Aid

School introduces need-based financial aid for M.S. in Data Science students.

Professional Programs

Data Science for Business Strategy Certificate launched with Darden School of Business and McIntire School of Commerce.

DEC. 2020

First Graduating Class

School graduates its first cohort of Online M.S. in Data Science students.

APR. 2021

\$2 Million Gift Announced

Capital One's Center for Machine Learning gives \$2 million to name central hub of School's future home.

JUN. 2021

HBCU Summer Research

School holds first Data Science for Health Equity HBCU summer research program

Women in Data Science

School matriculates first M.S. in Data Science cohort with a female majority (52%)

OCT. 2021

Groundbreaking of New Home

University celebrates groundbreaking of School of Data Science future home at the Emmet-Ivy Corridor.

Government Equity Cohort

School launches inaugural Government Equity Cohort in partnership with the Weldon Cooper Center for Public Service.

MAY. 2022

Nearly 600 Alumni

School holds first in-person graduation since COVID, and total alumni reach 568.

JUL 2022

5-Year Strategic Plan

School finalizes new five-year strategic plan and Phil Bourne renews as dean for another term.

SEP. 2022

Digital Humanities

UVA Digital Humanities Certificate moves from the Library to the School of Data Science.

MAY 2020

Data Science Minor

UVA Faculty Senate approves undergraduate minor in data science.

OCT. 2020

Collaboratory in Education

Schools of Data Science and Education launch the Collaboratory for the Advancement of Education and Data Science.

Data Activist in Residence

School hires first Data Activist in Residence

NOV. 2020

Girls Who Code

School of Data Science sponsors first hackathon for newly initiated UVA Chapter of Girls Who Code.

MAR. 2021

Ph.D. Approved by BOV

UVA Board of Visitors approves resolution for a Ph.D. in Data Science.

MAR. 2021

300+ Alumni

School graduates 7th cohort of M.S. in Data Science students, surpassing 300 alumni.

JUL 2021

Diversity, Equity and Inclusion

School hires its first Associate Dean of DEI

JAN. 2022

Collaboratory in Business

School of Data Science and Darden School of Business launch the Collaboratory for Applied Data Science in Business.

MAR. 2022

Office of Student Affairs

School hires first Assistant Den of Student Affairs

JUN. 2022

Data Justice Academy

School holds first Data Justice Academy, a 9-week undergraduate summer research program for underrepresented populations in data science.

AUG. 2022

First Ph.D. Cohort

School welcomes nine doctoral students as first Ph.D. in Data Science cohort.

UVA Data Points

School launches UVA Data Points podcast.

School of Data Science Celebrates Third Year

September 2022 marks the School of Data Science's third birthday as well as the introduction of the institution's new five-year strategic plan. Since its founding as the newest and twelfth school at the University of Virginia, the School of Data Science has accomplished much and marked multiple milestones over the years. In the last year alone, the School has launched a Ph.D. in Data Science, doubled its teaching and research faculty, built out its administrative infrastructure, broken ground on its future home, approved strategic and inclusive excellence plans, held its inaugural Data Justice Academy, and is about to put forward a new undergraduate degree for University and state approvals.



SCHOOL of DATA SCIENCE

A Nexus of Discovery



The School of Data Science's new home, scheduled to open early 2024, will stand at a vital intersection for the University of Virginia, connecting Central Grounds with the athletics complex and fields, the Law School, and the Darden School of Business. A vibrant hub built to foster collaboration, the building will bring people together from across the University, the city of Charlottesville, and beyond.

www.datascience.virginia.edu



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