

Texas State University

HARNESSING BIG DATA



# BIG IDEAS

Big Data is changing Texas and the world. Texas State faculty are leading data scientists who have partnered with the National Institutes of Health and Fortune 500 companies. The Harnessing Big Data initiative synergizes ongoing efforts and positions Texas State as an international leader in data science.

## A **BIG** Impact - HARNESSING BIG DATA

Texas State has assembled an expert team of researchers from almost every field of study with the mission to work at the intersection of analytics and artificial intelligence to understand and solve world problems. We are applying Big Data solutions to improve mental health treatments, address business challenges, and support the safety and security of the state of Texas and our nation.

### Big Data Applications Developed at Texas State

#### Health Care

- Increase accuracy of medical scans and reduce diagnostic errors
- Identify new approaches to enhance treatment and reduce side effects for chronic pain, multiple sclerosis, HIV, and mental health

#### Business

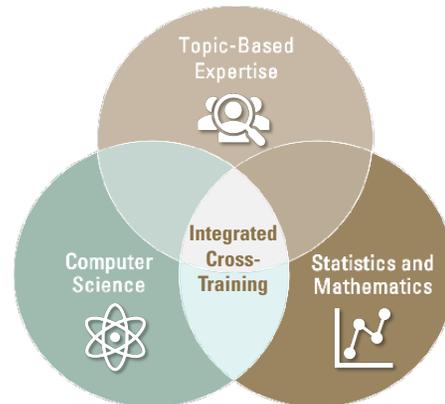
- Personalize insurance policies to reduce costs and minimize risk
- Automate detection of physical and digital piracy

#### Public Safety

- Develop real-time monitoring for international cyberattacks
- Enhance capability to identify misinformation in social networks

### A New Training Model

Demand for data science skills is growing exponentially and outpacing the supply of skilled applicants. Texas State faculty have developed an interactive student training model that enables data science training for students across majors to prepare for data science jobs in their field.



## **BIG** *Philanthropic Opportunities*

- Endow the Harnessing Big Data Program Fund to provide flexible resources to implement and sustain this initiative
- Seed and accelerate Big Data projects that focus on health, business, or social science solutions
- Fund a Data Science Innovator Award to recognize innovative applications of data science
- Provide scholarship funds to recruit students interested in data science
- Provide summer scholarships for undergraduates to work with faculty on data science research projects
- Support student access to boot camp style training in data science
- Sponsor a data science showcase or student pitch competition
- Fund graduate student fellowships to collaborate with faculty on data science research
- Provide funding for renowned data scientists to speak on campus or serve as visiting scholars
- Establish an endowed professorship to support a distinguished faculty in conducting cutting-edge research
- Create an endowed chair to support recruitment of a top scholar to provide leadership in data science instruction and research

### Your Invitation

We invite visionary philanthropic partners to support our students and faculty in discovering sustainable solutions for global issues through innovative research.

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