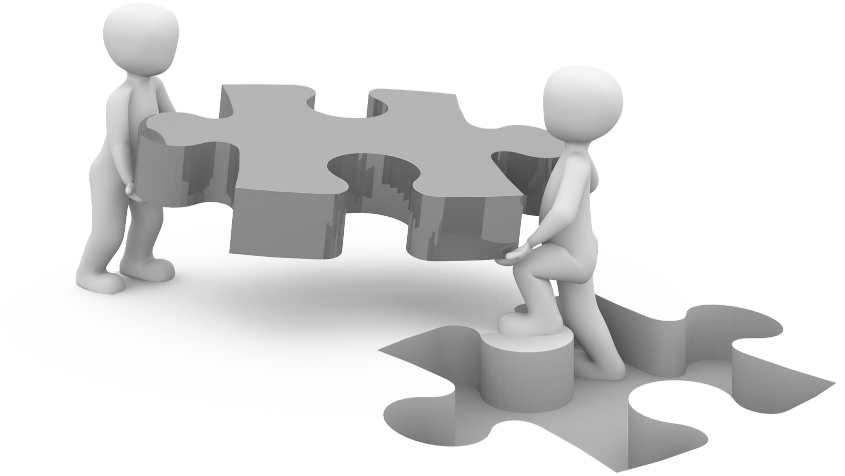
TEXAS A&M
Institute of
Data Science



Early Career Collaboration Program

Information Session

https://u.tamu.edu/TAMIDS-ECCP

PROGRAM TEAM

Nick Duffield, PhD FACM FIEEE FIET
Director, Texas A&M Institute of Data Science (TAMIDS)
Professor, Electrical and Computer Engineering

Drew Casey
Assistant Director for Program Engagement (TAMIDS)
Primary Contact—Early Career Collaboration Program
drew.casey@tamu.edu | 979.845.6574

PROGRAM GOALS

- Catalyze new collaborations with TAMIDS Thematic Labs
- Build on investments and leverage/enhance on research portfolio
- Expand research on the foundations or applications of **Data Science**, **Artificial Intelligence** (AI), or **Machine Learning** or incorporating these element into other fields
- Collaborations with strong potential to persist beyond the two-years
- Generate additional collaborative activities, funding proposals, or other support activities

PROGRAM STRUCTURE

- Each award will provide funding for up to two (2) years
- Expect up to four (4) awards this cycle
- Submission Deadline is **March 25**, 2024, 11:59 pm CST
  - *Awards communicated by May 6, 2024*
- Upload a PDF through online submission form

APPLICANT TEAM

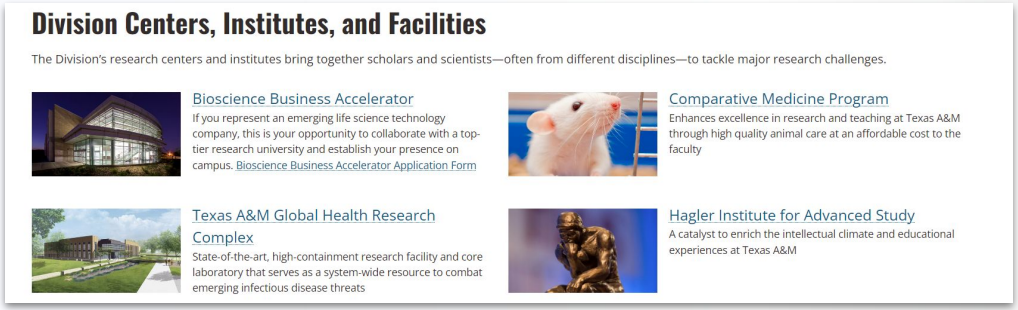
- Two (2) faculty or other PI-eligible researchers
  - One *TAMIDS Thematic Lab* member
  - One Non-*Thematic Lab* member
  - One early career (tenure-track Assistant Professor)
- Adloc to TAMU (including Galveston and Qatar), TEES, TEEX, AgriLife Research, AgriLife Extension, or TTI
- Limit of one application per cycle

FUNDING

- Awarded $20,000 each year (total $40,000)
  - *Second year funding contingent on review of year one report*
- Funds may support postdoctoral researchers or graduate students through salary, tuition, and fees.
- Funding does NOT support travel, equipment, or faculty salaries.
- Proposals require summary budget describing how the award will support the proposed activities

FACILITIES

- Utilize TAMIDS shared collaboration spaces and online training resources
- Texas A&M High Performance Research Computing (HPRC) resources
- Other research division centers, institutes, and facilities.



Division Centers, Institutes, and Facilities

The Division's research centers and institutes bring together scholars and scientists—often from different disciplines—to tackle major research challenges.

Bioscience Business Accelerator

If you represent an emerging life science technology company, this is your opportunity to collaborate with a top-tier research university and establish your presence on campus. Bioscience Business Accelerator Application Form

Comparative Medicine Program

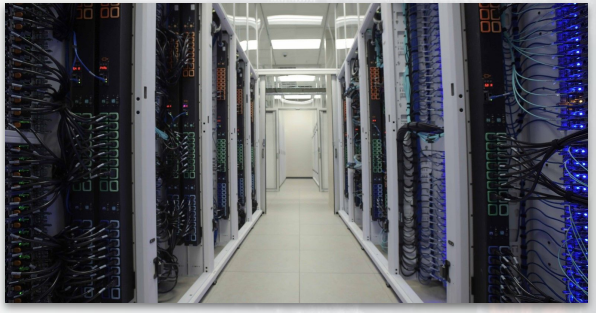
Enhances excellence in research and teaching at Texas A&M through high quality animal care at an affordable cost to the faculty

Texas A&M Global Health Research Complex

State-of-the-art, high-containment research facility and core laboratory that serves as a system-wide resource to combat emerging infectious disease threats

Hagler Institute for Advanced Study

A catalyst to enrich the intellectual climate and educational experiences at Texas A&M



OUTCOMES

- Year One Report
- Submit a collaborative proposal within two (2) years
  - Identify funding opportunities
  - Submission of proposals through TAMIDS is encouraged
  - TAMIDS will be provided proposal development support
- Additional collaborative activities, funding proposals, or other support activities

CONNECTION TO PRIORITY AREAS

- National-level priority areas identified in relevant reports and initiatives
  - *US Presidential Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence*
- Texas A&M's major strategic initiatives (involving Data Science/ML/AI)
- Rapidly growing and high-impact areas in AI, (e.g., Generative AI)
- Broadening Data Science, ML, and AI knowledge or skills in new communities.
- Enhancing the University-Workforce Pipeline to data-rich industries.

ENGAGEMENT WITH TAMIDS COMMUNITY

In addition to research activities, applicant teams must…

- Propose engagement with TAMIDS or its Thematic Labs
- Have ecosystem development plan, e.g., through education, training, or outreach

Discuss engagement opportunities with Drew Casey, drew.casey@tamu.edu

Example TAMIDS Activities

- **Data Science STEW** (Seminars, Tutorials, and Educational Workshops)
- Data **Competitions & Hackathons**
- **Lunch-N-Learn Industry Talks**
- A **broad affiliate network** with over 1,000 undergraduate and graduate students, 200 faculty, and growing industry partners

APPLICATION PROCEDURE

- **Cover Page** (one page)
  - Title (max 180 characters)
  - Contact Information
  - Summary (max 200 words)
  - Up to four (4) keywords
- **Project Description** (three pages)
  - Proposed Research
  - Position and Alignment
  - Engagements & Broader Impacts
  - Up to four (4) keywords
  - Members outside College Station, describe remote collaboration plan
- **Resumes** (max two pages)
  - Both team members
- (Optional) **Documentation of Connection to Priority Areas** (max two pages)
- Upload one PDF document to online submission form by **March 25**, 2024, 11:59 pm CST

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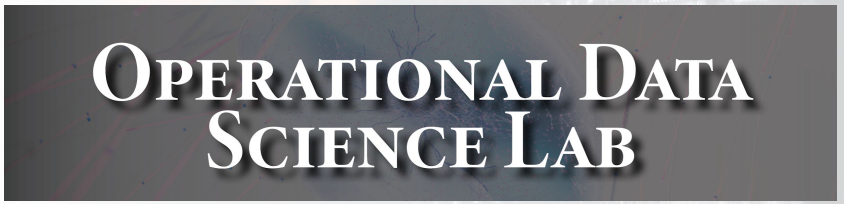
Thematic Labs



Thematic Data Science Labs

- TAMIDS establishes new labs that develop knowledge, resources, and community around a thematic area of data science, encompassing research, education, and outreach.
- Eight (8) Thematic Labs to work with… dozens of researchers
- TAMIDS supports post-doctoral researchers and graduate students working on lab research projects.
- Exploring themes in Data Science, Artificial Intelligence, and Machine Learning

- Conduct collaborative pilot research projects
- Develop training, tutorials, case studies, and for-credit courses
- Establish research and education data resources
- Organize workshops and seminar series
- Recruit additional members
- Involve students in Lab research and education activities
- Develop proposals for funding based on the work of the Lab

Ongoing Projects

- Classification of Water Stress in Cotton via Convolutional Neural Networks
- Evapotranspiration Estimation in Cotton Crops
- Yield Prediction for Cotton Crops
- Predicting Hydrologic Intensity in Texas from Climate Projections
- Optimizing Agricultural Water Management: A Climate-Smart Approach to Reduce Carbon Intensity
- Applications of Computer Vision in Precision Livestock Farming (TAMIDS Operational Data Science Lab)

Lab Members

Haoyu Niu [Director], Research Engineer III, TAMIDS / ECE

Nick Duffield, Professor, Department of Electrical and Computer Engineering, & TAMIDS Director

Yalong Pi, Associate Research Scientist & TAMIDS / GEOSAT Operational Data Science Lab Director

Janvita Reddy, Graduate Research Assistant

Jian Tao, TAMIDS Assistant Director for Project Development & TAMIDS Digital Twin Lab Director

Collaborators

Collaborating Organizations

Texas Water Resource Institute

Texas A&M Corpus Christi

Texas A&M AgriLife Research & Extension

West Texas A&M University

Texas A&M Beef Center

Goanna Ag

United States Department of Agriculture

University of Maryland

Texas A&M Departments:

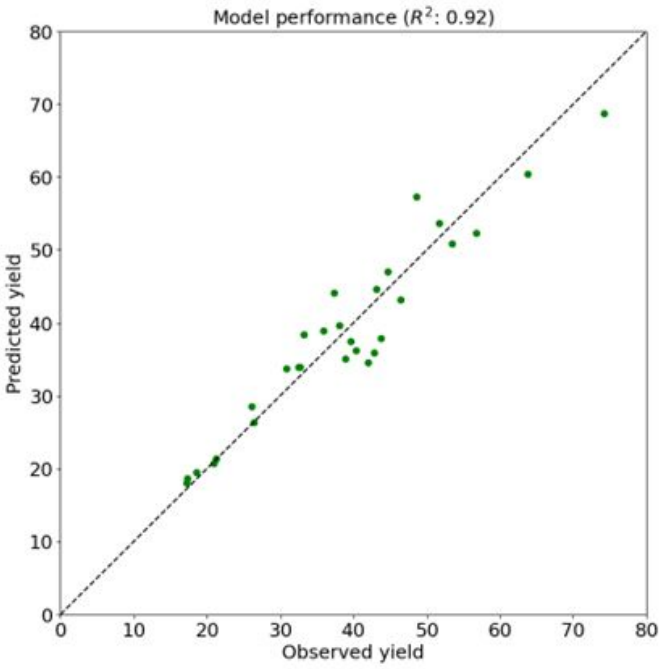
- Agricultural Economics
- Soil & Crop Science
- Biological & Agricultural Engineering
- Animal Science

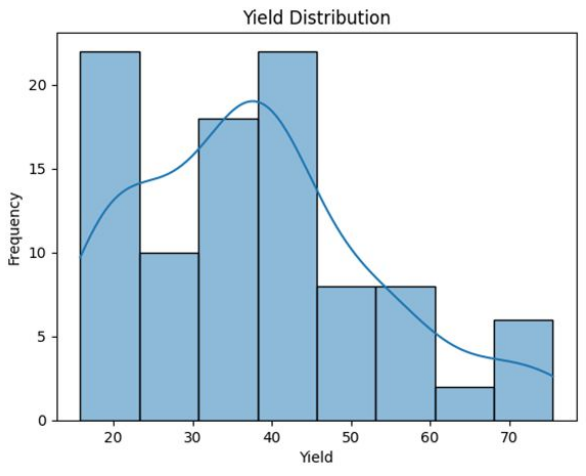
Collaborating Researchers

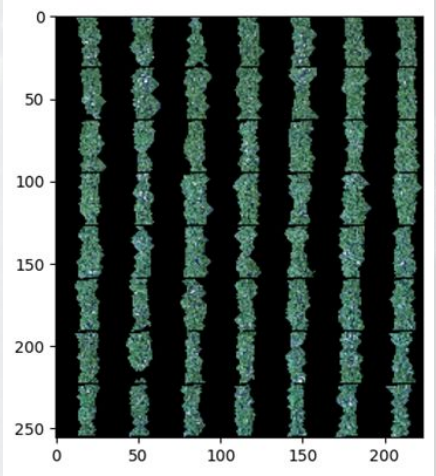
Pancho Abello | AgriLife
Mahendra Bhandari | AgriLife
Craig Bednarz | WTAMU
Salvatore Calabrese | TAMU-BAEN
Bardia Heidari Haratmeh | TWRI
Timothy Goebel | USDA
Fouad Jaber | TAMU-BAEN
Juan Landivar-Bowles | AgriLife
Robert Lascano | USDA
Pankaj Pal | AgriLife
David Parker | WTAMU
Payton Paxton | Goanna Ag
Nithya Rajan | TAMU-SCS
Avay Risal | University of Maryland

Yield Prediction

Yield Prediction for Cotton Crops



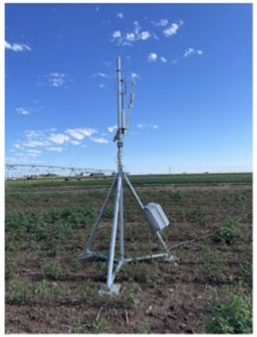




Adapting the CNN architecture for cotton yield prediction while maintaining the image as the input introduces an intriguing approach to leveraging spatial patterns within the visual data to forecast agricultural outcomes.

ET Estimation

Evapotranspiration Estimation in Cotton Crops



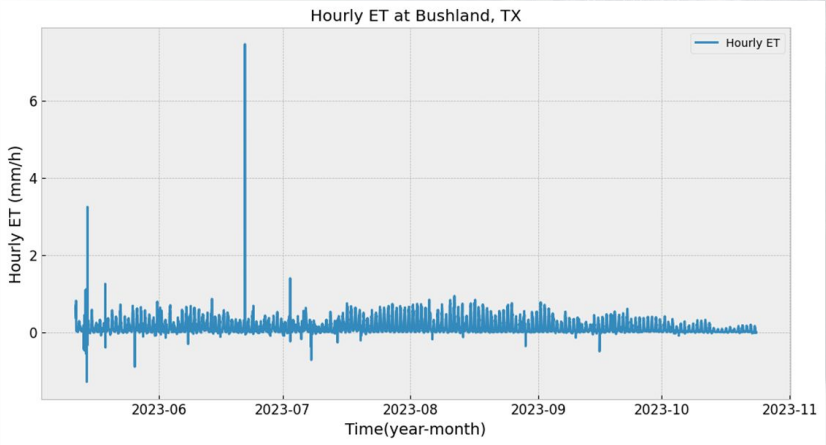
Eddy covariance system

Lysimeter

Soil moisture probe

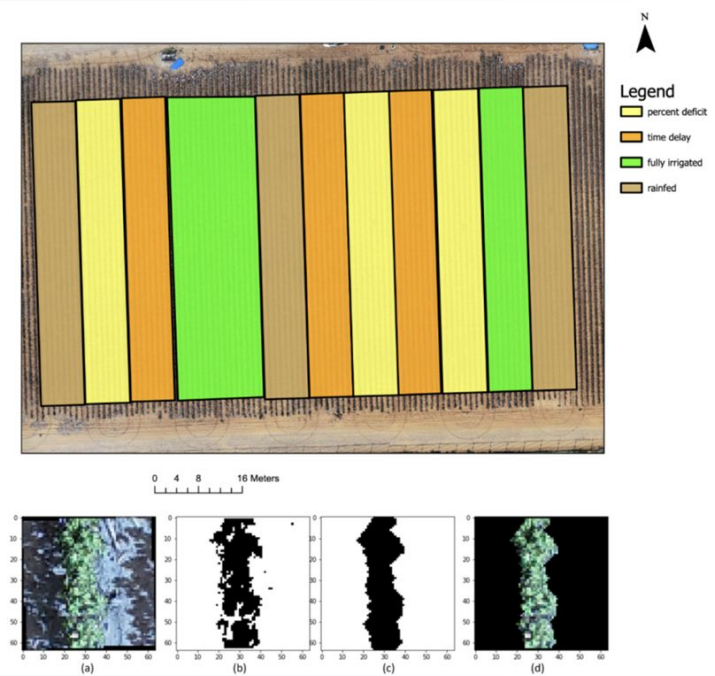
Texas's agricultural communities face limited water supplies, increasing pumping costs, variable rainfall patterns, and increasing competition with municipalities.

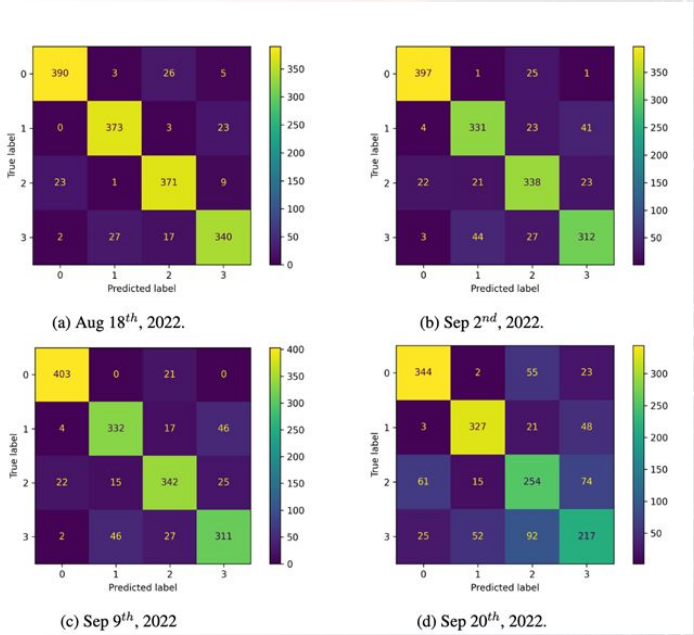
Timely delivery and efficient use of irrigation water is crucial for the sustainability of agricultural production.



Water Stress Detection

Classification of Water Stress in Cotton via Convolutional Neural Networks





Embracing smart irrigation management techniques empowers growers to irrigate more efficiently, promoting sustainable agricultural production.

TEXAS A&M Institute of Data Science

Data Justice Lab

Overview

Data for social justice is a rapidly developing area, which includes good systems, ethical AI, data equity, and social justice informatics.

Core Principles:

1. Diversity, inclusion, equity, social justice, and ethics
2. Data-driven, communication-centered, information-oriented
3. Empirically-grounded, human-focused, social impact
4. Collaborative, multi-disciplinary, community-engaged, public-oriented

Current Projects

Tracking Real-Time Micro-Aggressions in STEM Learning Environments

Understanding and improving medical AI developers' knowledge and practices of Ethical AI

Conservative Talk Radio and Misinformation: A case study of the "Big Lie" about voter fraud in the 2020 US election

Analyzing Inequities in Twitter Discourses on Black Maternal Health

Data Justice Lab

Lab Members

Lu Tang [Director]
Professor, Communication & Journalism
ltang@tamu.edu

Ruihong Huang [Associate Director]
Associate Professor, Computer Science & Engineering
huangrh@tamu.edu

Sherecce Fields
Professor, Psychological & Brain Sciences
safields@tamu.edu

Jinsil Hwaryoung Seo
Associate Professor, Department
hwaryoung@tamu.edu

Theodora Chaspari [Associate Director]
Assistant Professor, Computer Science & Engineering
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Na Zou
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Leann Smith
Assistant Professor, Psychological & Brain Sciences
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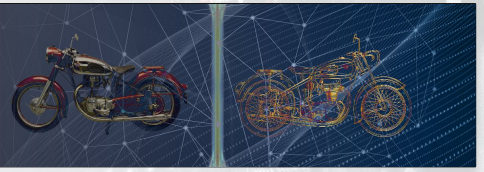
Yunkang Yang
Assistant Professor, Communication & Journalism
yunkangyang@tamu.edu

TEXAS A&M Institute of Data Science

Digital Twin Lab



Lab Members

We have **12 members** from **9 different organizations**

TEXAS A&M UNIVERSITY Engineering

TEXAS A&M UNIVERSITY School of Performance, Visualization & Fine Arts

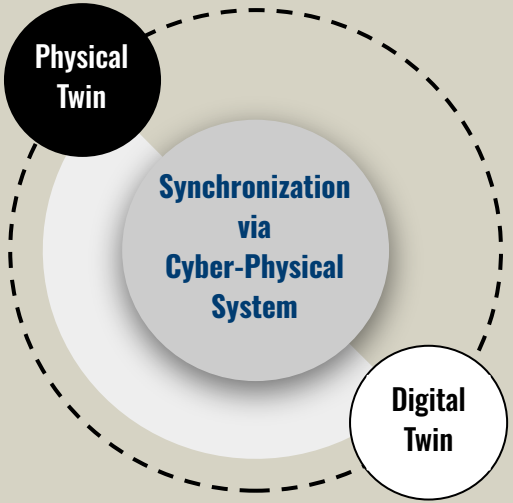
TEXAS A&M UNIVERSITY Internet2 Technology Evaluation Center

TEES Texas A&M Engineering Experiment Station

TEXAS A&M AgriLife

Research

Exploratory, **pilot**, & **funded** projects leb by lab members



Education

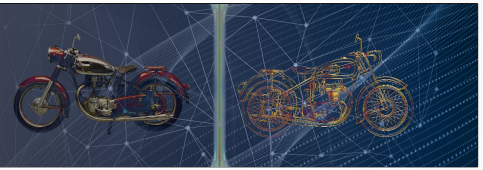
Offering courses on digital twin technologies & methods

VIZA 689 Introduction to Digital Twin Tech (permanent course, starting Fall 2024)
Instructor: Dr. Jian Tao

PETE 689 / NUEN 689
Physics-based and Data-Driven Reduced-Order Modeling for Engineering Systems
Instructors: Drs. Eduardo Gildin & Jean Ragusa

CSCE 645 / VIZA 675 Geometric Modeling
Instructor: Dr. Wenping Wang

DIGITAL TWIN LAB



Lab Activities

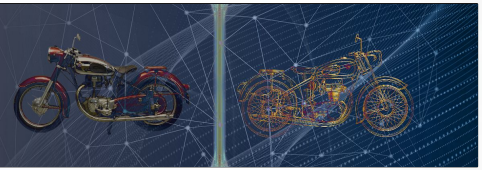
Overview

- Develop **innovative computing and networking technologies**
- Develop efficient t**heory/data-driven modeling methods**
- Develop **educational programs** on digital twin technologies
- Build a **Center of Excellence** on digital twin-related research

Projects

- Digital Twins for In-season Precision Crop Management
- Digital Twin for Enhancing Geo-Systems (Drilling and Production) in the Context of Clean Energy Extraction
- A Digital-Twin-Enabled Testbed for Public Safety Communication Technologies
- Smart Communities, Smart Responders (SCSR) – *An AI for IoT Information (AI3) Prize Competition*

Digital Twin (DT): A virtual representation of real-world object, person, or process, contextualized in a digital version and synchronized at a specified frequency and fidelity.



Lab Members

- **Jian Tao** [Director], Assistant Professor, School of Performance, Visualization & Fine Arts
- **Satish Bukkapatnam**, Professor, Industrial & Systems Engineering
- **Eduardo Gildin**, Professor, Petroleum Engineering
- **Juan A. Landivar**, Resident Director and Professor, Texas A&M AgriLife Center at Corpus Christi
- **Xin Li**, Professor, School of Performance, Visualization & Fine Arts
- **Walt Magnussen**, Director, TAMU Internet2 Technology Evaluation Center
- **Zheng O'Neill**, Associate Professor, Mechanical Engineering
- **Jean Ragusa**, Professor, Nuclear Engineering
- **Narasimha Reddy**, Professor,Electrical & Computer Engineering
- **Andre Thomas**, Associate Professor of the Practice, School of Performance, Visualization & Fine Arts
- **Wenping Wang**, Professor, Computer Science & Engineering
- **Xudong Zhang**, Professor, Industrial & Systems Engineering

TEXAS A&M Institute of Data Science

KNOWLDEGE DEVELOPMENT LAB

Overview

Leads and supports the development of knowledge and expertise in Data Science, Machine Learning, and Artificial Intelligence through multiple programmatic and research activities.

- Support research and infrastructure for professional training.
- Design, development, delivery, and administration of academic programs and data science courses
- Provide consultancy and other resources for data science, AI, and machine learning education

Projects & Activities

- Data Science Seminars, Tutorials, and Educational Workshops
- Academic Programs (Courses, Capstones, Certificates, and Degrees)
- Scholarships, Travel Grants, and Sponsorship of student activities/programs

KNOWLDEGE DEVELOPMENT LAB

Academic Programs

Texas A&M
Master of Science in Data Science

- An on-campus, 30 credit hour interdisciplinary program
- Four academic departments offer a track CSE, ECE, Math, and Statistics
- Students take four (4) common core courses in the first semester, and then take three (3) elective courses in each subsequent semesters

TEXAS A&M UNIVERSITY
College of Arts & Sciences

TEXAS A&M UNIVERSITY
Engineering

Undergraduate Certificate in Data Analytics for Petroleum Industry

Masters of Science in Energy, Energy Digitization Theme

College of Engineering Sprint Courses

2024 Data Science Course Development Grant Program
Deadline is March 4, 2024, 11:59 pm CST.

KNOWLDEGE DEVELOPMENT LAB

Professional Training & Student Programs

Biomedical Data Science Online Training Program

Python Primer

R Primer

Professional Education Workshops in Data Science Foundations and Computational Practice

Student Data Science Competitions

- TAMIDS Annual Student Data Challenge
- Texas A&M Datathon
- tidalTAMU Hackathon

Ph.D Student Ambassador Scholarship Program

KNOWLDEGE DEVELOPMENT LAB

Lab Members

- **Nick Duffield** [Director], Professor, Electrical & Computer Engineering
- **Drew Casey**, Assistant Director, TAMIDS
- **Snehashis Chakraborty**, Research Engineer III, Electrical & Computer Engineering
- **Krishna Narayanan**, Professor, Electrical & Computer Engineering
- **Haoyu Niu**, Research Engineer III, Electrical & Computer Engineering
- **Yalong Pi**, Associate Research Scientist, TAMIDS
- **Christi Retzer**, Program Manager, TAMIDS
- **Jian Tao**, Assistant Professor, Performance, Visualization & Fine Arts

Collaborating Organizations

- College of Engineering
- College of Arts and Science
- College of Veterinary Medicine & Biomedical Sciences
- Graduate & Professional School,
- Education Research Center
- Center for Teaching Excellence, Energy Institute
- Mays Business School
- Health Sciences Center
- Cybersecurity Center
- Prairie View A&M University
- Texas Southern University

TEXAS A&M Institute of Data Science

Operational Data Science Lab

About the Lab

A joint enterprise between the Texas A&M Institute of Data Science (TAMIDS) and the Texas A&M Center for Geospatial Science, Applications, and Technology (GEOSAT)

Transform Texas A&M into a living laboratory for Data Science, AI, and Machine Learning

How to Get Involved:

- As an operational unit with data or problems, or
- As a researcher with creative ideas, or
- As a student who wishes to join new data projects

Research and Academic Goals

- Identify new data-driven research problems arising from operational contexts
- Derive new insights and analyses from data and embody these in software tools
- Engage the broader community of researchers with operational data challenges
- Provide hands-on opportunities for students to work with real-world data
- Leverage the results for funding proposals and outreach

OPERATIONAL DATA SCIENCE LAB

ODS Lab Members

Yalong Pi [Director], TAMIDS Associate Research Scientist, Operational Data Science

Xinyue Ye [Associate Director], Texas A&M GEOSAT & Department of Landscape Architecture & Urban Planning

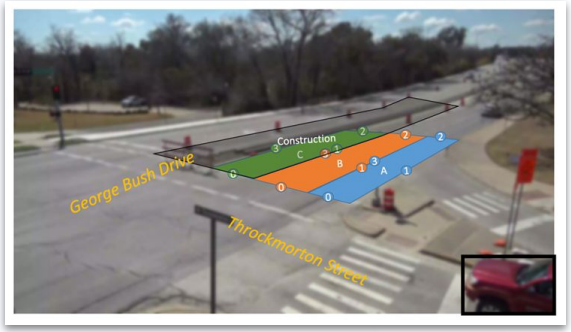
Nick Duffield, TAMIDS Director and Department of Electrical & Computer Engineering

Snehashis Chakraborty, TAMIDS and Department of Electrical & Computer Engineering

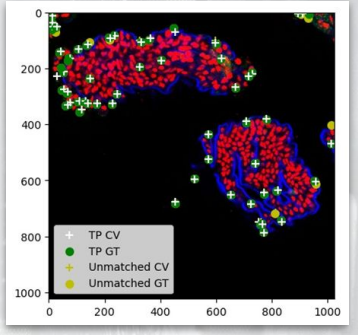
Jian Tao, TAMIDS and School of Performance, Visualization & Fine Arts

Current Collaborators: Vivek Gupta, TTI; Michael Fox, ITEC; Walter R. Magnussen, ITEC; Patrick Newman, ITEC; David Retchless, Galveston; Luis Tedeschi, Animal Science; Karun Kaniyamattam, Animal Science; Daniel Paredes-Sabja, Biology; Zhe Zhang, Geography

Research Highlights

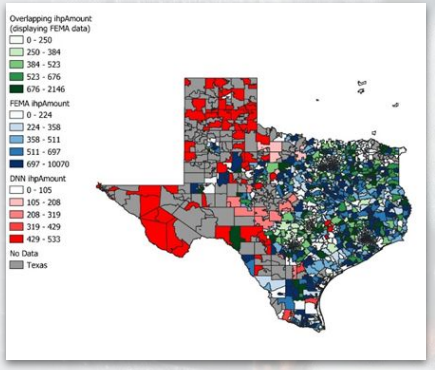


Transportation



C.difficile **Spore Detection**

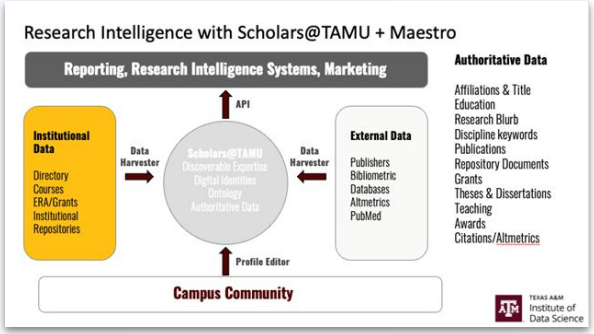
Precision livestock farming



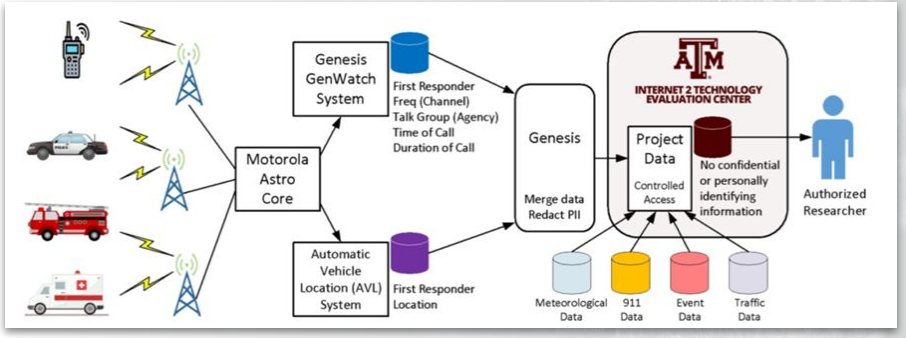
Social Media in Disasters

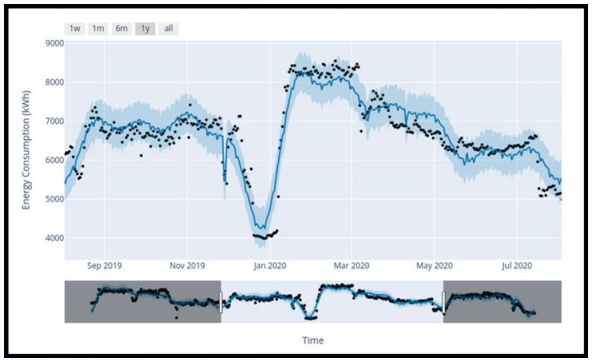
Research Highlights

RDASH: Research Organizational Intelligence



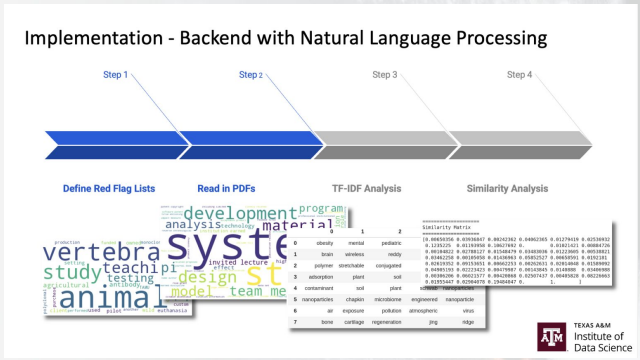
Data & Load Modeling for Public Safety Radio Transition to LTE





Energy Consumption Analysis

Lighthouse: A Red Flag AI Tool for Research Compliance



TEXAS A&M Institute of Data Science

Scienctific Machine Learning Lab

https://sciml.tamids.tamu.edu

Established January 2021

The SciML Lab research mission is to support and grow a multidisciplinary community of researchers across Texas A&M involved in the development of SciML algorithmic, computational, and applied components.

The SciML also aims to be a catalyst for accelerating education in SciML, through short hands-on courses, seminars, workshops, and case studies.

Ulisses Braga-Neto | SciML Lab Director
Professor, Electrical & Computer Engineering
ulisses@tamu.edu

SCIENCTIFIC MACHINE LEARNING LAB

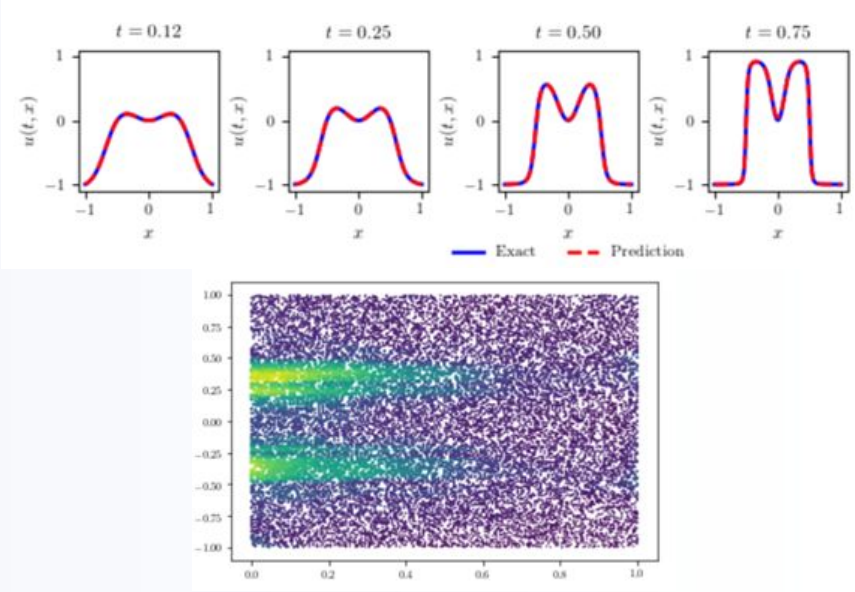
Lab Members

Ulisses Braga-Neto	Professor, Electrical & Computer Engineering
Raymundo Arroyave	Professor, Materials Science and Engineering
Raktim Bhattacharya	Associate Professor, Aerospace Engineering
James Cai	Professor, Veterinary Medicine & Biomedical Sciences
Yalchin Efendiev	Professor, Mathematics
Eduardo Gildin	Associate Professor, Petroleum Engineering
Lisa Perez	Director for Advanced Computing Enablement, HPRC
Jean Ragusa	Professor, Nuclear Engineering
Jian Tao	Assistant Professor, Performance, Visualization & Fine Arts
Lifan Wang	Professor, Department of Physics & Astronomy

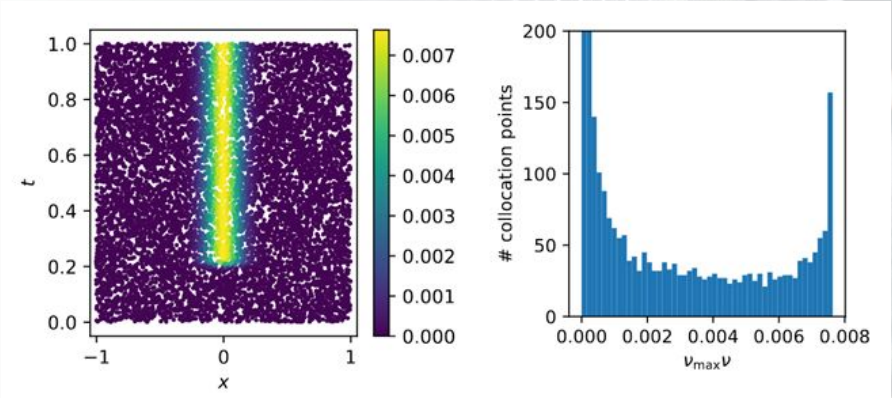
Collaborating non-lab members: Simo Särkkä (Aalto University); Aaro Järvinen (VTT Technical Research Centre of Finland); Alexei Poludnenko (UConn); David Jeffreys (Univ. Nevada); Nicholas Suntzeff (PHYS); Elaine Oran (AERO)

Research Highlights

"Self-adaptive physics-informed neural networks" (Nearly 250 citations, widely used in academia and industry)

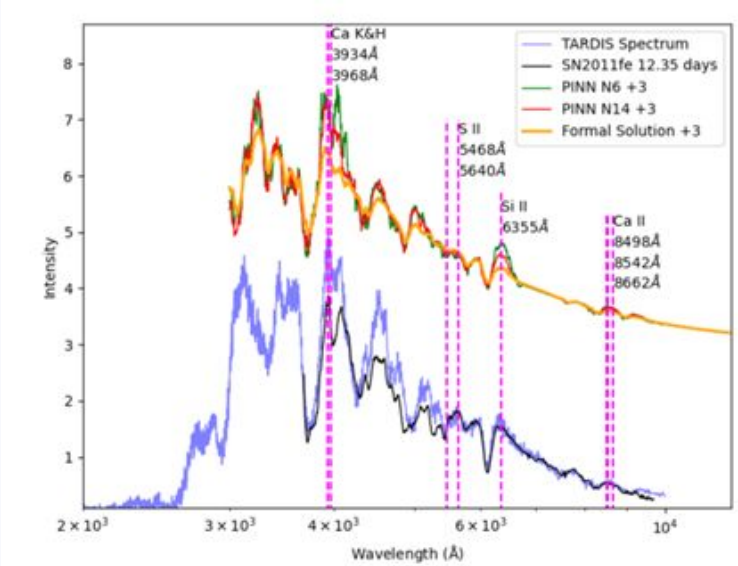


"PINN with Adaptive Localized Artificial Viscosity" (Collaboration with Eduardo Gildin, PETE)

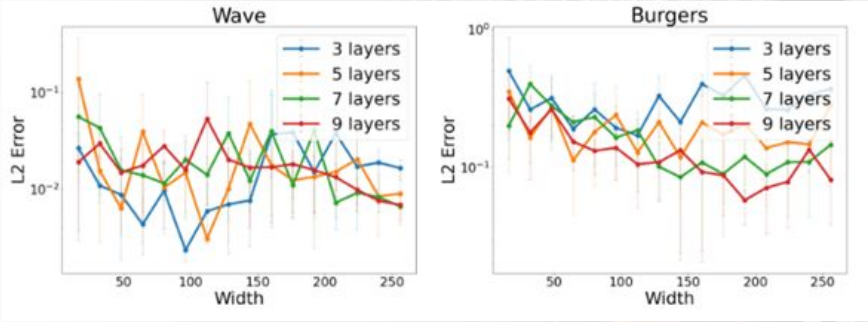


Research Highlights

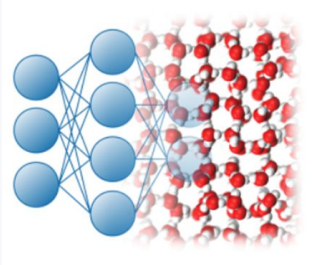
"Using Physics Informed Neural Networks for Supernova Radiative Transfer Simulation" (Collaboration with Lifan Wang, PHYS)



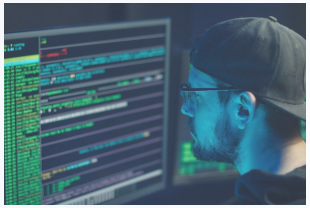
"Auto-PINN: Understanding and Optimizing Physics-Informed Neural Architecture" (Collaboration with Xia Hu, Rice University)



Education and Community Building



- **Annual SciML Workshop**
  Informal workshop showcases current work of Texas A&M's SciML community. Through exchange of ideas and results, the workshop fosters coherent research efforts, new scientific advances, and enhance competitiveness for external funding.



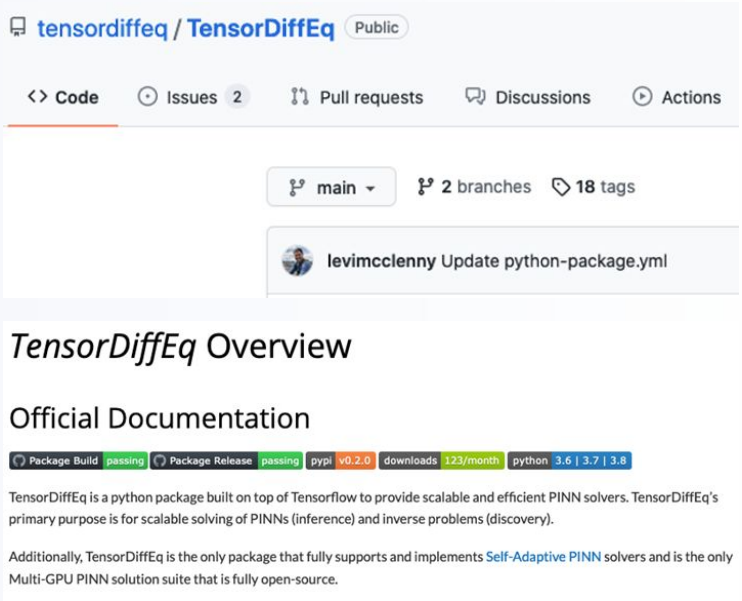
- **Hands-On Training Sessions**
  Promote SciML methods within Texas A&M research community. Trainings include: HPRC for scientific applications, Julia for SciML, and *TensorDiffEq* (our open-source software for PINNs).

- **Seminar Series**
  SciML Lab's seminar series, featuring well-known SciML researchers.

- **New SciML Class (ECEN 689)**
  Scientific Machine Learning (Spring 2022-2024). Supported by TAMIDS under the Data Science Course Development Program.

TensorDiffEq

Open-Source Software



Levi McClenny | Lead Developer
Graduate Research Fellow
Electrical & Computer Engineering

- SciML Lab members collaborating software package to implement collocation-based neural PDE solvers, data assimilation solvers, self-adaptive solvers (a technology proposed by SciML Lab members), as well as parameter inference and PDE discovery.
- The *TensorDiffEq* preprint was listed among the "Must-read Papers on PINNs" by the Python Repo.

LD McClenny, MA Haile, UM Braga-Neto (2021) TensorDiffEq: Scalable Multi-GPU Forward and Inverse Solvers for Physics Informed Neural Networks, arXiv preprint arXiv:2103.16034, 2021

TEXAS A&M Institute of Data Science

URBAN AI LAB

Lab Overview

Mission: Promote innovative research of human and urban dynamics that is increasingly taking place

in a hybrid physical-virtual world enabled by AI technologies.

Goal: Articulate a long-term convergence research agenda with transformative social and AI technological changes.

Outcome: Major fundings and integrative research along with human/community-AI collaboration.

Seven Departments, Four Colleges, Two Campuses, Two State Agencies

- **Xinyue Ye**, Professor, LAUP
  (Urban AI Director)
- **Galen Newman**, Professor/Dept. Head, LAUP
- **Keith E. Biggers**, Director, TCAT
- **Bahar Dadashova**, Assoc. Research Scientist, TTI
- **Xiaofeng Nie**, Assoc. Professor, ETID
- **David P. Retchless**, Asst. Professor, TAMUG
- **Nitesh Saxena**, Professor, CSCE
- **Zhe Sarina Zhang**, Asst. Professor, GEO

National Institutes of Health

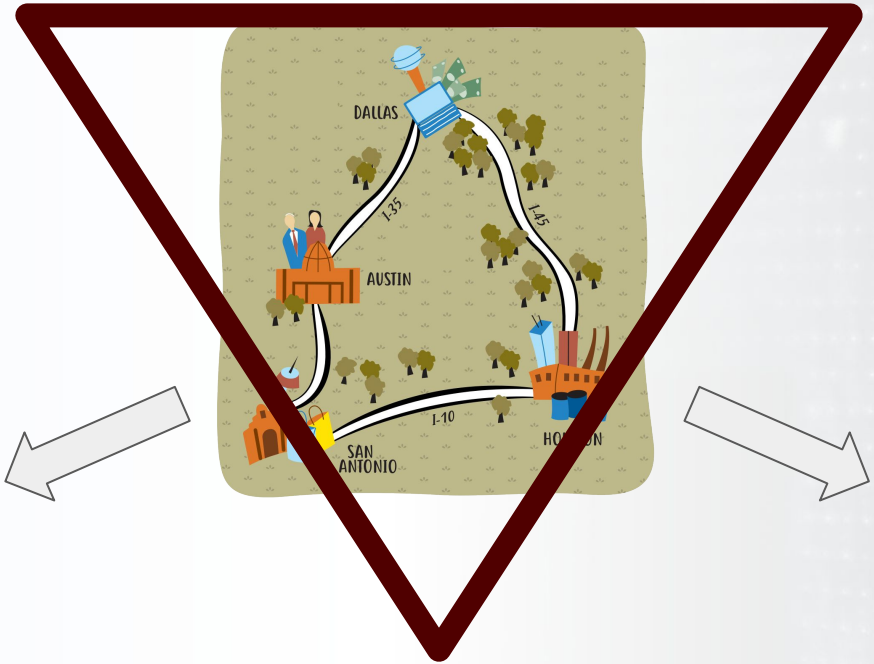
Social Sciences and Humanities Research Council of Canada

Canada

New Texas Triangle

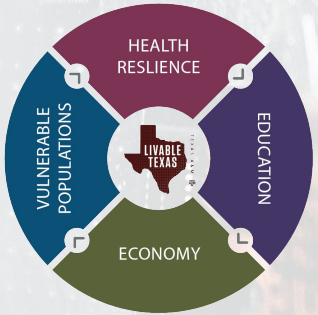
Concepts

Human Dynamics,
Urban Systems,
21st Century Communities,
Hybrid Physical-Virtual World,



Methods

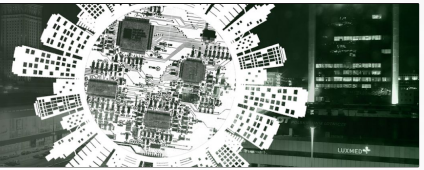
Visual Analytics, Urban AI
Workflow Automation,
Text as Data, Data Fusion
Image & Video Analytics,
Space-Time Analysis,
Real-Time System,
Spatial Econometrics,
Emerging ICT,
Location-aware technologies



Transformative Outcomes

Sustainable Housing, Community Development

livabletexas.tamu.edu/initiatives/



Ongoing Grants

- Advanced Technologies and Workforce Development for Coastal Adaptation and Resilience in Texas (DoC/NOAA)
- Collective Intelligence Decision Making via Dynamic Knowledge Graph with Trusted Cross-Organizational and Privacy Preserving Integration (DoD)
- Community-driven Geospatial Approach to Improving Public Health Data Systems in Beaumont-Port Arthur, Texas (NASEM)
- DEAP (Data Science Equity, Access, and Priority in Research and Education) Institute in Research and Education for Science Translation via Low-Resource Neural Machine Translation (NASA)
- Digital-Twin Enabled Extended Active Safety Analysis for Mixed Traffic (FHA)
- Investigating the Combined Impact of Spatial Social Networks and Environmental Exposure on Minority Youths' Mental Health (Department of Health and Human Services)
- Synchronizing Decision-Support via Human- and Social-centered Digital Twin Infrastructures for Coastal Communities (NSF)
- The Center of Excellence in Hispanic Housing Studies (HUD)
- Towards Targeted Risk Mitigation: Community Engaged, Fast Impact Estimation of Extreme Weather using Big Social and Climate Data (Texas OneGulf/Department of the Treasury)
- Ultra-Wideband Fall Detection and Prediction Solution for People Living with Dementia (NIH)

VISCERAL INTERSENSORY VISUALIZATION & INFORMATION DESIGN LAB

Common themes, methods, opportunities for cross benefits and growth

- Interdisciplinary & Intellectual Diversity
- Risk perception/Dangerous Simulation and Training/Reduce Cognitive load or workload
- Climate Change, Conservation, Protection, and Sustainability
- Emotional impact data presentation
- Useful interpretation and presentation of Public Data Sets and Open source Data
- Invisible or hard to see data
- Display as a channel for communication

Draws on research, educational, and collaborative strengths from:

- Performance, Visualization, & Fine Arts
- Statistics
- Computer Science
- Mechanical Engineering

Pilot Projects

- Data Materialization, Climate Change
- Climate Change, Risk Mitigation, Flood Awareness

Lab Members

Name	Relevant Research Area, Role	Department/College
Ann McNamara	Data Visualization, Analytics, Human-Computer Interaction, Perception	Visualization/Architecture
Derya Akleman	Data Analytics, Statistics	Statistics/Science
James Caverlee	Information retrieval, data mining, recommendation systems	Computer Science/Engineering
Cynthia Hipwell	Surface physics, Sensors, Actuators for haptics and Human Machine Interfaces	Mechanical Engineering/Engineering
Shuiwang Ji	Data Visualization & Exploration, Machine/Deep Learning and Data Mining	Computer Science/Engineering
Jeeeun Kim	Digital Fabrication, Human-Computer Interaction, Design	Computer Science/Engineering
Vinayak Krishnamurthy	Geometric Modeling, Human-Computer Interaction, Perception	Mechanical Engineering/Engineering
Courtney Starrett	Digital Fabrication, Data Physicalization, Data Sculpture, Design	Visualization/Architecture

u.tamu.edu/TAMIDS-ECCP

TEXAS A&M
Institute of
Data Science

Early Career Collaboration Program

Catalyzing new collaborations with early career Texas A&M researchers and Data Science Thematic Labs

Drew Casey
Assistant Director for Program Engagement (TAMIDS)
Primary Contact—Early Career Collaboration Program
drew.casey@tamu.edu | 979.845.6574

Deadline is March 25, 2024