

20
23



AI IN HEALTH CONFERENCE

HOSTED BY THE KEN KENNEDY INSTITUTE

October 9-12, 2023
Houston, Texas

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INSTITUTE

AI, Data, and Computing for Global Impact

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MESSAGE FROM THE KEN KENNEDY INSTITUTE LEADERSHIP

The Ken Kennedy Institute at Rice University is pleased to offer the 2nd annual AI in Health Conference (AIHC) in Houston, TX. Thank you for joining us for an exciting two days of cutting-edge conversations on artificial intelligence in healthcare and public health. The conference features a remarkable lineup of invited speakers, panel discussions, technical talks, an exhibit hall, networking receptions, poster presentations, and five add-on workshops.

The AI in Health Conference takes place in Houston, home of the largest medical center in the world — the Texas Medical Center — which hosts 60+ member institutions that are visited by 10 million patients each year. The intersection of healthcare and artificial intelligence holds potential unlike any other innovation the medical industry has seen before. Artificial intelligence's ability to operate and automate tasks at heightened speed, efficiency, and accuracy has undoubtedly already made an impact on day-to-day hospital care and administrative functions. Our conference program will address the current state of artificial intelligence in health and showcase a research-based outlook on the latest trends, challenges, and opportunities in this rapidly evolving field.

We hope that this conference will inspire you, broaden your understanding of AI in healthcare, facilitate meaningful connections with industry experts, and foster innovation by encouraging new ideas, research, and discussions. We look forward to the conversations that will occur in the next few days and the partnerships that will spark from them.

On Tuesday and Wednesday, our speakers will highlight advancements in the data science of sleep, natural language processing, health equity, responsible AI, and predictive health topics with short technical talks included on both days.

Tuesday's Sponsor Networking Reception will include a specialty wine, cheese, and heavy appetizer selection, with magic and entertainment to complete an evening of connecting with fellow conference attendees and sponsors. Wednesday's Poster Networking Session will showcase exciting research happening in the field. Networking breaks during the conference will feature specialty coffee, a popsicle bar, and a donut wall.

The five workshops over Monday, Tuesday, and Thursday will cover genomics, digital twins and healthcare innovation, robotics and nursing, entrepreneurship, and new frontiers in cancer research. If you would like to add a workshop, please reach out to conference staff to update your registration.

The Ken Kennedy Institute at Rice University is committed to solving critical global challenges through innovative research and collaborations in artificial intelligence, data, and computing. We are thrilled to host this conference at the service of our regional and global artificial intelligence community.

We are grateful to our sponsors, partners, speakers, and attendees who share our enthusiasm for supporting and engaging with this community. Finally, thank you to our conference committee for their many contributions to this year's conference.

On behalf of the conference committee, Rice University, and the Ken Kennedy Institute team, thank you for being here.

Dr. Lydia E. Kavraki
Director, The Ken Kennedy Institute

Dr. Angela D. Wilkins
Executive Director, The Ken Kennedy Institute

2023 PROGRAM COMMITTEE

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The Ken Kennedy Institute is an interdisciplinary group that works collaboratively on groundbreaking research in artificial intelligence, data, and computing. We foster a clear and strategic pathway to real-world impact by enabling new conversations that drive innovative research, develop new technology, and advance professional training opportunities.

We cannot achieve our mission without meaningful connections and valuable insight. Please contact us with your questions and ideas at kenkenney@rice.edu.

The Ken Kennedy Institute
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AI IN HEALTH CONFERENCE CODE OF CONDUCT

The organizers invite all attendees, sponsors/exhibitors, speakers, media, volunteers, and other participants to help us realize a safe and positive conference experience for everyone. The Ken Kennedy Institute works to increase tolerance, opportunity, and diversity in an effort to continually encourage the open exchange of ideas. For these reasons, the Institute is committed to providing a harassment-free experience at all the events it organizes. If you experience or witness harassment or discriminatory behavior at the conference, report this promptly to kenkenney@rice.edu.

The conference venue is shared with members of the public that are not attendees of the conference; please be respectful to all patrons of these locations.

Please note that audio recording, videotaping, and/or photography of any portion of the conference material is strictly prohibited without prior consent of the staff.

2023 |



AI IN HEALTH CONFERENCE

HOSTED BY THE KEN KENNEDY INSTITUTE

DAY ONE KEYNOTE SPEAKERS



DR. ASHURA BUCKLEY

The National Institute
of Mental Health, NIH



DR. JUSTIN T. BAKER

McLean Hospital,
Harvard Medical School

INVITED CONFERENCE SPEAKERS



**DR. VLADIMIR
BRAVERMAN**

Rice University



**DR. THEODORA
CHASPARI**

University of Colorado
Boulder



**DR. XIA
(BEN) HU**

Rice University



**DR. ROOZBEH
JAFARI**

Texas A&M University



DR. DAVID JAFFRAY

UT MD Anderson
Cancer Center



**DR. LYDIA
KAVRAKI**

Rice University



**DR. KRISTIN
KOSTICK-QUENET**

Baylor College of Medicine

2023 |



AI IN HEALTH CONFERENCE

HOSTED BY THE KEN KENNEDY INSTITUTE

DAY TWO KEYNOTE SPEAKERS



DR. FEI WANG

Weill Cornell Medicine
at Cornell University



**DR. JEFFREY
S. BROWN**

TriNetX, LLC

INVITED CONFERENCE SPEAKERS



**DR. VICENTE
ORDÓÑEZ-ROMÁN**

Rice University



**DR. KIRSTEN
OSTHERR**

Rice University



**DR. MICHELLE
PATRIQUIN**

The Menninger Clinic,
Baylor College of Medicine



**DR. LAILA
RASMY**

UTHealth Houston



DR. MYA SHIESS

McGovern Medical School
at UTHealth Houston



**DR. ANGELA
WILKINS**

Rice University



**DR. STEPHEN
T. WONG**

Houston Methodist

AI IN HEALTH 2023 | TUESDAY, OCT. 10

M Medical Humanities

N Natural Language Processing

R Networking

T Technical Talk

S The Data Science of Sleep

F The Future of Predictive Health

E Transparency, Equity, and Bias

W Workshop

8:15 a.m. – 9:00 a.m.

R Check-in + Breakfast » Auditorium / Exhibit Hall

9:00 a.m. – 9:05 a.m.

R Day 1 Welcome » Auditorium

Speaker(s): Lydia Kavradi, The Ken Kennedy Institute, Rice University

9:05 a.m. – 9:45 a.m.

S Keynote | Sleep in AI: From Disorders to Discovery » Auditorium

Speaker(s): Ashura (Shu) Buckley, The National Institute of Mental Health, NIH

9:45 a.m. – 10:25 a.m.

S Keynote | Sensing Psychosis: Deep Phenotyping in Neuropsychiatric Disorders » Auditorium

Speaker(s): Justin T. Baker, McLean Institute for Technology in Psychiatry (ITP), McLean Hospital, Harvard Medical School

10:25 a.m. – 11:00 a.m.

R Coffee Break » Exhibit Hall

11:00 a.m. – 11:20 a.m.

S Leveraging Sleep Data to Increase the Autonomy, Safety, and Outcomes of Patients in Intensive Mental Health Settings » Auditorium

Speaker(s): Michelle Patriquin, The Menninger Clinic, Baylor College of Medicine

11:20 a.m. – 11:40 a.m.

S Machine Learning Based Longitudinal Brain Connectomes as a Progression Marker for REM Sleep Behavior Disorder » Auditorium

Speaker(s): Mya Shiess, McGovern Medical School at UTHealth Houston

11:40 a.m. – 12:10 p.m.

S Panel | The Data Science of Sleep » Auditorium

Moderator(s): Michelle Patriquin

Speaker(s): Mya Shiess, Ashura (Shu) Buckley, Justin Baker

12:10 p.m. – 1:00 p.m.

R Lunch » Exhibit Hall

1:00 p.m. – 2:00 p.m.

T Technical Talks » Auditorium

2:15 p.m. – 2:50 p.m.

R Afternoon Break » Exhibit Hall

2:50 p.m. – 3:50 p.m.

N Panel | Exploring Generative AI's Role in Transforming Healthcare » Auditorium

Moderator(s): Lydia Kavradi

Speaker(s): Laila Rasmy, UTHealth Houston; Vicente Ordóñez-Román, Rice University; Kristin Kostick-Quenet, Baylor College of Medicine; Kirsten Ostherr, Rice University

3:50 p.m. – 3:55 p.m.

R Day 1 Closing Remarks » Auditorium

Speaker(s): Ramamoorthy Ramesh, Rice University

3:55 p.m. – 5:30 p.m.

R Sponsor Networking Reception » Exhibit Hall

Technical Talks » Auditorium

Moderator(s): **Denise Cavalier**, UT MD Anderson Cancer Center

1:00 p.m. – 1:15 p.m.

Machine Learning Driven Synthetic Gene Circuit Design for Cell Therapy Applications

Speaker(s): **Kshitij Rai**, Rice University

Authors: **Kshitij Rai**, Rice University; **Ronan O'Connell**, Rice University; **Todd Treangen**, Rice University; **Pankaj Mehta**, Boston University; and **Caleb Bashor**, Rice University

1:15 p.m. – 1:30 p.m.

A Digital Twin of Glucose Metabolism in T1D Using Physiology-Informed Generative Adversarial Networks

Speaker(s): **Marzia Cescon**, University of Houston

Authors: **Alvaro Crespo Santiago**, University of Houston and **Marzia Cescon**, University of Houston

1:30 p.m. – 1:45 p.m.

Predicting Acute Kidney Injury and Resource Utilization with Machine Learning Model Based on MIMIC-IV Database

Speaker(s): **Yukun Tan**, UT MD Anderson Cancer Center

Authors: **Yukun Tan**, UT MD Anderson Cancer Center; **Merve Dede**, UT MD Anderson Cancer Center; **Vakul Mohanty**, UT MD Anderson Cancer Center; **Jinzhuan Dou**, UT MD Anderson Cancer Center; **Holly Hill**, Rice University; and **Ken Chen**, UT MD Anderson Cancer Center

1:45 p.m. – 2:00 p.m.

PolyAMiner-Bulk: A Deep Learning Based Algorithm to Decode Alternative Polyadenylation Dynamics from Bulk RNA-Seq Data

Speaker(s): **Venkata Jonnakuti**, Baylor College of Medicine

Authors: **Venkata Jonnakuti**, Baylor College of Medicine; **Zhandong Liu**, Baylor College of Medicine; and **Hari Krishna Yalamanchili**, Baylor College of Medicine

2:00 p.m. – 2:15 p.m.

Multigrid Inspired Deep Learning Architectures for Medical Imaging Segmentation

Speaker(s): **Adrian Celaya**, Rice University, UT MD Anderson Cancer Center

Authors: **Adrian Celaya**, Rice University, UT MD Anderson Cancer Center; **Beatrice Riviere**, Rice University; and **David Fuentes**, UT MD Anderson Cancer Center

AI IN HEALTH 2023 | WEDNESDAY, OCT. 11

M Medical Humanities

N Natural Language Processing

R Networking

T Technical Talk

S The Data Science of Sleep

F The Future of Predictive Health

E Transparency, Equity, and Bias

W Workshop

8:15 a.m. – 9:00 a.m.

R Check-in + Breakfast » Auditorium / Exhibit Hall

9:00 a.m. – 9:05 a.m.

R Day 2 Welcome » Auditorium

Speaker(s): Angela Wilkins, The Ken Kennedy Institute, Rice University

E Introduction | Transparency, Equity, and Bias Sessions » Auditorium

Speaker(s): Xia (Ben) Hu, Rice University

9:05 a.m. – 9:45 a.m.

E Keynote | Towards Building Trustworthy Machine Learning Models in Medicine: Accuracy, Fairness, Explainability, and All That » Auditorium

Speaker(s): Fei Wang, Weill Cornell Medicine, Cornell University

9:45 a.m. – 10:05 a.m.

E Human-Centered AI: Exploring Bias, Privacy, and Collaborative Decision-Making for Healthcare Advancements » Auditorium

Speaker(s): Theodora Chaspari, University of Colorado Boulder

10:05 a.m. – 10:25 a.m.

E Digital Twin for Cardiovascular Health » Auditorium

Speaker(s): Roozbeh Jafari, Texas A&M University

10:25 a.m. – 11:00 a.m.

R Coffee Break » Exhibit Hall

11:00 a.m. – 12:00 p.m.

T Technical Talks » Auditorium

12:00 p.m. – 1:00 p.m.

R Lunch » Exhibit Hall

1:00 p.m. – 1:30 p.m.

F Keynote | Better Together: TriNetX Research Platform and the Value of Multi-Site Collaboration » Auditorium

Speaker(s): Jeffrey S. Brown, TriNetX, LLC

1:00 p.m. – 2:30 p.m.

M Responsible AI for Health – Deep Dive on Race and Ethnicity in Data » Room 280

Speaker(s): Kirsten Ostherr, Rice University

1:30 p.m. – 2:00 p.m.

F Cognitive Automation in Medical Care: A Case Study in Stroke » Auditorium

Speaker(s): Stephen T. Wong, Houston Methodist

2:00 p.m. – 2:30 p.m.

F Towards Bringing Theoretical Machine Learning and Algorithms to Digital Health: Progress and Challenges » Auditorium

Speaker(s): Vladimir (Vova) Braverman, Rice University

2:30 p.m. – 3:00 p.m.

R Afternoon Break » Exhibit Hall

3:00 p.m. – 3:45 p.m.

F Panel | The Future of Predictive Health » Auditorium

Moderator(s): David Jaffray, UT MD Anderson Cancer Center

Speaker(s): Jeffrey S. Brown; Vladimir (Vova) Braverman; Stephen T. Wong

3:45 p.m. – 5:00 p.m.

R Poster Presentation Reception » Exhibit Hall

Technical Talks **»** Auditorium

Moderator(s): **Samantha Nava**, The Ken Kennedy Institute, Rice University

11:00 a.m. – 11:15 a.m.

Integrative Imaging Informatics for Cancer Research: Workflow Automation for Neuro-Oncology (I3CR-WANO) Auditorium

Speaker(s): **Satrajit Chakrabarty**, UT MD Anderson Cancer Center

Authors: **Satrajit Chakrabarty**, UT MD Anderson Cancer Center; **Syed Abidi**, Washington University School of Medicine; **Mina Mousa**, Washington University School of Medicine; **Mahati Mokkarala**, Washington University School of Medicine; **Isabelle Hren**, Washington University in St. Louis; **Divya Yadav**, UT MD Anderson Cancer Center; **Matthew Kelsey**, Washington University School of Medicine; **Pamela LaMontagne**, Washington University School of Medicine; **John Wood**, UT MD Anderson Cancer Center; **Michael Adams**, UT MD Anderson Cancer Center; **Yuzhuo Su**, UT MD Anderson Cancer Center; **Sherry Thorpe**, UT MD Anderson Cancer Center; **Caroline Chung**, UT MD Anderson Cancer Center; **Aristeidis Sotiras**, Washington University School of Medicine; and **Daniel Marcus**, Washington University School of Medicine

11:15 a.m. – 11:30 a.m.

KombOver: Efficient K-Core and K-Truss Based Characterization of Chronic Disease Impact on the Human Gut Microbiome Auditorium

Speaker(s): **Nicolae Sapoval**, Rice University

Authors: **Nicolae Sapoval**, Rice University; **Marko Tanevski**, Rice University; and **Todd Treangen**, Rice University

11:30 a.m. – 11:45 a.m.

A Novel Method to Predict Cardiac Magnetic Resonance-Derived Ejection Fraction via a Deep Transfer Learning Approach Auditorium

Speaker(s): **Arnav Adhikari**, Baylor College of Medicine

Authors: **Arnav Adhikari**, Baylor College of Medicine; **G. Wesley Vick III**, Baylor College of Medicine; **Minh Nguyen**, Baylor College of Medicine; **Tam Doan**, Baylor College of Medicine; **Mounica Y. Rao**, Baylor College of Medicine; **Anitha Parthiban**, Baylor College of Medicine; **Lance Patterson**, Baylor College of Medicine; **David Ouyang**, Cedars-Sinai Medical Center, Stanford University; **Jeffrey S. Heinle**, Baylor College of Medicine; **Christopher A. Caldarone**, Baylor College of Medicine; and **Lalita Wadhwa**, Baylor College of Medicine

11:45 a.m. – 12:00 p.m.

Explainable AI in Integrative Models of Rare Cancers Auditorium

Speaker(s): **Holly Hill**, Rice University

Authors: **Holly Hill**, Rice University; **Ken Chen**, UT MD Anderson Cancer Center; and **Marek Kimmel**, Rice University

2023 PROGRAM | WORKSHOPS

MONDAY, OCTOBER 9

8:15 a.m. – 5:00 p.m.

W **Reading, Assembling, Analyzing, & Designing Genomic Data** **» Auditorium***
Moderator(s): **Todd Treangen**, Rice University; **Vicky Yao**, Rice University
Speaker(s): **Fritz Sedlazeck**, Baylor College of Medicine; **Stephanie Hicks**, Johns Hopkins Bloomberg School of Public Health; **Blake Hanson**, UTHealth Houston; **Sonia Villapol**, Houston Methodist Research Institute; **Buck Samuel**, Baylor College of Medicine; **Qiliang Lai**, Rice University

10:00 a.m. – 1:00 p.m.

W **Digital Twins in Healthcare + Applying AI/ML to Accelerate Innovation in Healthcare** **» Room 280***
Speaker(s): **Andy Lin**, Mark III Systems; **Justin Meade**, Texas Children's Hospital; **David Niewolny**, NVIDIA; **Greg Zynda**, NVIDIA

TUESDAY, OCTOBER 10

10:45 a.m. – 3:00 p.m.

W **The Future of Robot-Assisted Nursing** **» Room 280***
Moderator(s): **Shannan K. Hamlin**, Houston Methodist; **Lydia Kavradi**, Rice University; **Vaibhav Unhelkar**, Rice University
Speaker(s): **Susan McBride**, The University of Texas at Tyler; **Addison Clark**, The University of Texas at Arlington; **Laurel Riek**, University of California San Diego; **Mari Tietze**, The University of Texas at Arlington; **Dan Popa**, University of Louisville; **Victor H.S. Wang**, care.coach; **Katherine Wuestney**, Washington State University

THURSDAY, OCTOBER 12

8:00 a.m. – 12:30 p.m.

W **Challenges and Opportunities of AI Entrepreneurship in Healthcare** **» Auditorium***
Moderator(s): **Lance Black**, Prana Thoracic; **Christy Cardenas**, Grit Ventures, Grit Labs; **Verena Kallhoff**, Greater Houston Partnership
Speaker(s): **Yael Katz**, Simbryo Technologies; **Omar Mohtar**, ParaDocs Health; **Allison Post**, The Texas Heart Institute; **Ashutosh (Ashu) Sabharwal**, Rice University; **Christine Holyfield**, University of Arkansas; **Michelle Patriquin**, The Menninger Clinic, Baylor College of Medicine; **Ayse McCracken**, Ignite Health, eNOVATE Health Ventures LLC; **Ann Tanabe**, BioHouston; **Rima Chakrabarti**, KdT Ventures; **Ezekiel Fink**, Asterion AI

12:30 p.m. – 5:00 p.m.

W **Team Data Science in Cancer: Bridging People and Perspectives for Progress** **» Auditorium***
Moderator(s): **David Jaffray**, UT MD Anderson Cancer Center; **Heiko Enderling**, UT MD Anderson Cancer Center; **Bissan Al-Lazikani**, UT MD Anderson Cancer Center
Speaker(s): **Caroline Chung**, UT MD Anderson Cancer Center; **Eric Stahlberg**, Frederick National Laboratory for Cancer Research; **Bissan Al-Lazikani**, UT MD Anderson Cancer Center; **Carole Baas**, Alamo Breast Cancer Foundation; **Linghua Wang**, UT MD Anderson Cancer Center; **Jeff Siewerdsen**, UT MD Anderson Cancer Center; **Gary An**, University of Vermont; **Tom Yankeelov**, The University of Texas at Austin; **Christopher Gibbons**, UT MD Anderson Cancer Center

* If you would like to add a workshop after you have already registered, please reach out to conference staff to update your registration.



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KEYNOTE
SPEAKERS

TECHNICAL
PROGRAM

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FEATHER SESSIONS

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HALL

NETWORKING
RECEPTIONS

POSTER
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POST-CONFERENCE
WORKSHOPS



AI IN HEALTH CONFERENCE

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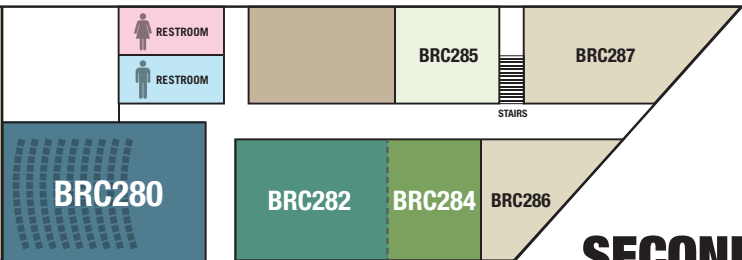


**UNDERGROUND
PARKING**

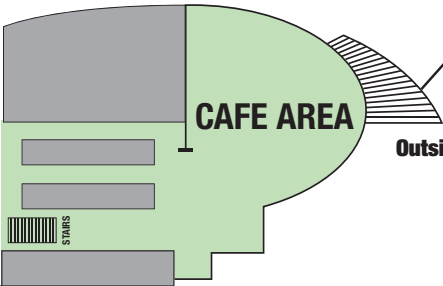


DRYDEN STREET

FIRST FLOOR

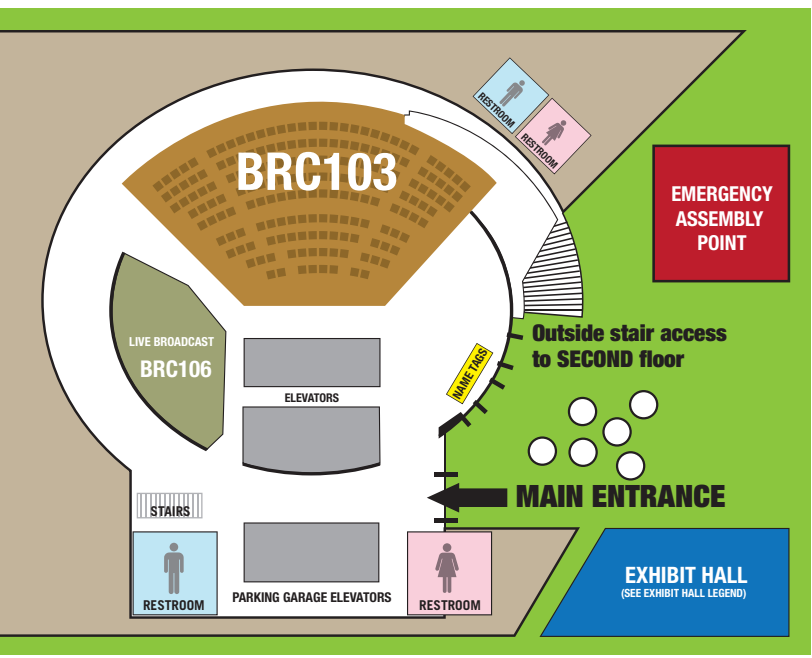


SECOND FLOOR



Outside stair access to **FIRST** floor

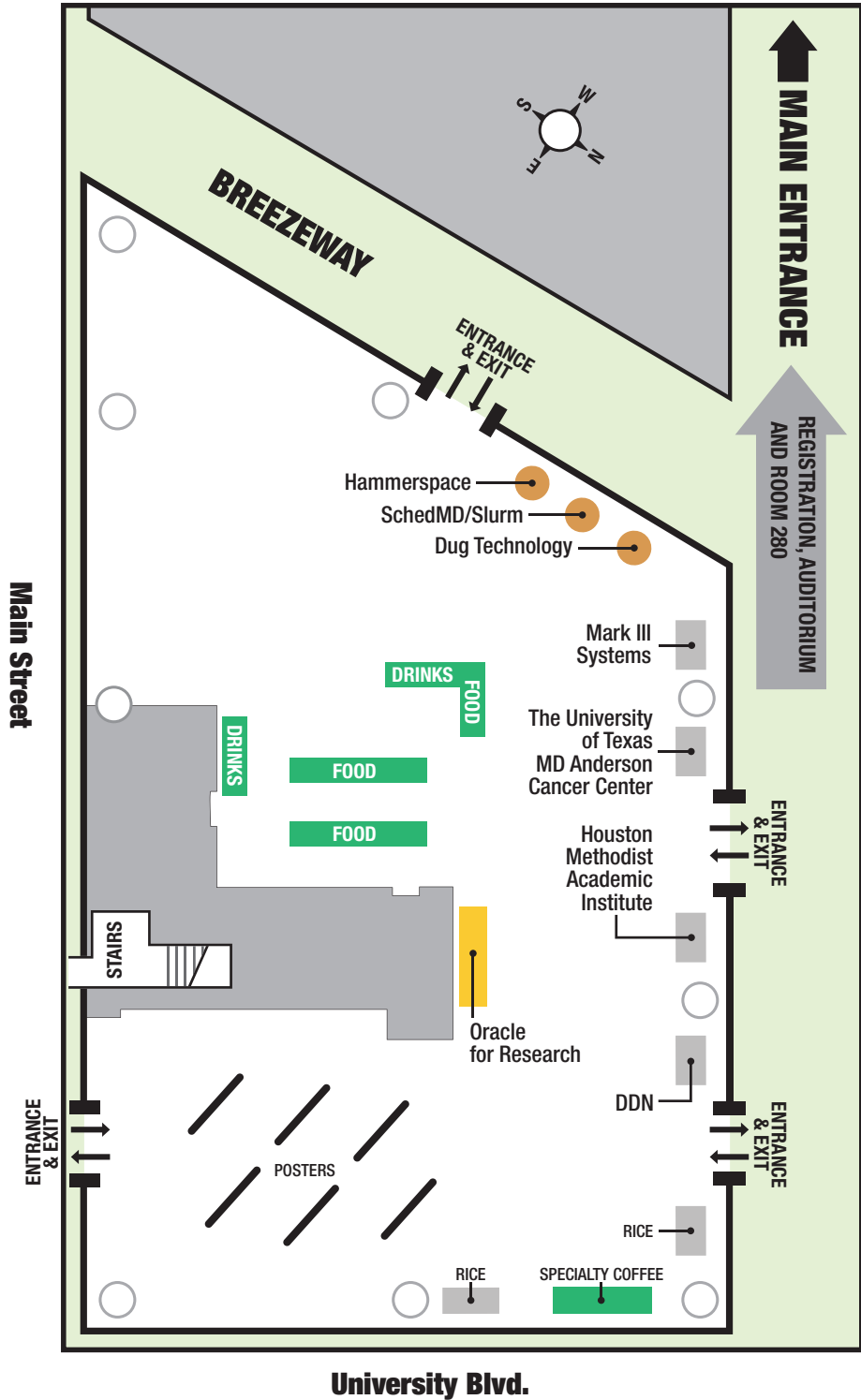
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MAIN STREET

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Ken Kennedy Institute Computational Science & Engineering Graduate Recruiting Fellowships

Funded by the proceeds from the Ken Kennedy Institute's Energy High Performance Computing Conference, the goal of this fellowship program is to attract exceptional graduate students to Rice University the fields of high performance computing, computational science and engineering, and data science, with special consideration given to students with research interests in areas of relevance to the energy industry.

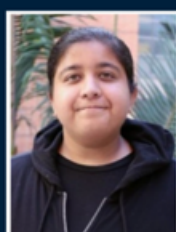
2023-2027



Alexander Ahrens
Applied Physics



Cesar Cardenas
Statistics



Khushbu Pahwa
Computer Science



Xiaorong Zhang
Electrical & Computer Engineering

2022-2026

Brianna Barrow

Computer Science

Alyssa Cantu

Computer Science

Rose Graves

Statistics

Kevin McCoy

Statistics

John Steinman

Computational Applied

Mathematics &

Operations Research

Ria Stevens

Computer Science

Xiaoyu (Rosie) Zhu

*Earth, Environmental,
and Planetary Sciences*

2021-2025

Kelsey Murphy

*Earth, Environmental,
and Planetary Sciences*

Jose Palacio

Statistics

Xinyu (Xin) Yao

Computer Science

2020-2024

Kristen Curry

Computer Science

Raul Garcia

*Computational &
Applied Mathematics*

Bryant Jerome

Applied Physics

Mirae (Sunny) Kim

Computer Science

Camille Little

*Electrical & Computer
Engineering*

Naiming (Lucy) Liu

*Electrical & Computer
Engineering*

Catherine Tuppen

*Electrical & Computer
Engineering*

Cameron Wolfe

Computer Science

Tiancheng Xu

Computer Science

2022-2023 Ken Kennedy Institute Sponsored Fellowship Recipients



Rice Ken Kennedy Institute Graduate Fellowship Award Recipients (top row, from left to right): Fatima Ahsan, Paola Cascante-Bonilla, Chen Chen, Aditya Desai, Victoria Granja, Yumeng Liu, Zichang (Emma) Liu, Nicolae Sapoval, Guanchu Wang



Andrew Ladd Memorial
Excellence in Computer Science



Scott Morton Memorial
Graduate Fellowship

ENERGY HIGH PERFORMANCE
COMPUTING CONFERENCE

The Ken Kennedy Institute is pleased to recognize the achievements and research of Rice University's graduate students by awarding fellowships to students pursuing research related to high performance computing, computational science and engineering, and data science. Fellowship awards are made possible with support from bp, ExxonMobil, Shell, SLB, the Energy High Performance Computing Conference, and the Andrew Ladd, Ken Kennedy-Cray, and Scott Morton endowments.

We aim to continue expanding our fellowship opportunities beyond the energy sector to include disciplines in healthcare and public health for upcoming award cycles. To learn more about sponsoring a graduate fellowship, please email kenkenedy@rice.edu.



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POSTERS

Examining the Accuracy of ML Algorithms to Classify Patients' VTE (Venous Thromboembolism) Risk Assessment

Datonye Omunguye and Joshua Hopkins (Northwood University)

Revolutionizing Healthcare with AI: Enhancing Patient Care and Safety Through Deep Learning and Clinically Validated Data

Mohammad Anwaruzzaman (Evercare Tec)

Detection of Psychosis in Reddit Textual Data Represented as Graphs Using an Explainable Deep Learning Model

Steven Le (Alumni of University of Texas at Dallas)

Synthetically Rebalancing Healthcare Datasets via Conditional DDPM

Caleb Fikes (Rice University); Jiayi Chen, Keira Behal, and Sophia Xiao (Emory University)

Bayesian Calibration on the Rosenthal Model

Jnanajyoti Bhaumik (State University of New York at Buffalo); Luke Mohr and Alexander Kitt (EWI)

Identify Cancer Cells Based on Their Biophysical Properties

Elie Mulamba (African Institute for Mathematical Sciences)

Fit-Twin & AI: Can it Enhance Psychiatric Care?

Muhammad Sulaiman (UiT The Arctic University of Norway)

Use of Deep Learning Methods for the Prediction of Mandibular Osteoradionecrosis in Head and Neck Cancer Patients Treated with Radiotherapy

Laia Humbert Vidan and Teresa Guerrero Urbano (Guy's and St Thomas' NHS Foundation Trust/King's College London); Vinod Patel (Guy's and St Thomas' NHS Foundation Trust); and Andy King (King's College London)

Extraction of Immunosuppressive Medication from Clinical Notes Using Natural Language Processing Among Patients with Liver Transplantation

Enshuo Hsu and Stephen L Jones (Houston Methodist Research Institute); Joyane Longmire (North Carolina Agricultural & Technical State University); Linda W Moore, Janine Hyden, Elizabeth Brombosz, and Mark R Ghobrial (Houston Methodist Hospital)

Are Non-Experts Comparable to Experts? Image S&egmentation Acceptability Benchmarking from a Crowdsourced Initiative

Kareem Wahid, Onur Sahin, Suprateek Kundu, Anthony Alanis, Salik Tehami, David Fuentes, Abdallah Mohamed, Renjie He, Mohammed Naser, and Clifton Fuller (UT MD Anderson Cancer Center); Diana Lin and Michael Cislo (Memorial Sloan Kettering Cancer Center); Mathis Rasmussen and Stine Korreman (Aarhus University Hospital); Benjamin Nelms (Canis Lupus), Simon Duke (Cambridge University Hospitals); Michael Sherer and James Murphy (University of California San Diego); John Christodouleas (Elekta); Erin Gillespie (Fred Hutchinson Cancer Center)

Predicting Stress and Providing Counterfactual Explanations: A Pilot Study on Caregivers

Kei Shibuya (Rice University/NEC); Zachary King, Maryam Khalid, Han Yu, Khadija Zanna, Christopher Fagundes, and Akane Sano (Rice University); Yufei Shen (The University of Texas at Austin); Ryan Brown (University of California San Francisco); Marzieh Majd (Brigham and Women's Hospital/Harvard Medical School)

ChatGPT Performance in Simulated Cardiac Arrest Care & Bradycardia Management Using American Heart Association Guidelines: An Exploratory Study

Summer Chavez, Cecilia Pham, Salik Tehami, Romi Govender, Lola Adepoju, and Winston Liaw (Tilman J. Fertitta Family College of Medicine, University of Houston)

Albinism Skin Lesion Detection Using Artificial Intelligence in Sub-Saharan Africa

Mira T. Mutombo and Véronique M. Kakiessse (University Clinics of Kinshasa, Democratic Republic of the Congo); Christian N. Mayemba, Didier Mbuyi Mukendi, Jean Tshibangu Muabila, Kalonji Kalala, Maximilien V. Dialufuma, Jean Marie Tshimula, René Manassé Galekwa, Aristarque Ilunga, Hugues Kanda, D'Jeff K. Nkashama, Serge Mundele, Richy Ngombo Zola, Élie Ngambwa Mulumba, Heber Dibwe Fita, and Patience Kinshie Lenye (Groupe de Recherche de Prospection et Valorisation des Données (Grepovad))

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Omar Mohtar, Vibhav Jha, Dhini Nasution, and Dickson Chen (ParaDocs Health); Matthew Segar (Texas Heart Institute)

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Leveraging Multimodal Models for Scanned Document Classification in Electronic Health Records

Ishav Desai and Akshat Kumar (UTHealth Houston McGovern Medical School); Elmer Bernstam (UTHealth Houston McWilliams School of Biomedical Informatics)

Harnessing Multimodal Healthcare Data

Renjie Hu (The University of Houston); Amany Farag and Yong Chen (The University of Iowa)

Accelerating Colon Cancer Discovery with a Novel Vision AI Approach

Dharanidhar Dang (The University of Texas San Antonio); Amitash Nanda, Atishna Samantray, and Debashis Sahoo (University of California San Diego)

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Kevin McCoy (Rice University); Christine Peterson and Moiz Ahmad (UT MD Anderson Cancer Center)

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Antonio Mendoza and Joseph Cavallaro (Rice University); Mehdi Razavi (Texas Heart Institute)

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Modern Medicine Renaissance: The Unfolding Narrative of AI Healthcare Compliance

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Jordan Holbrook (The University of Houston)

Improve Drug Combination Prediction by Large Language Model Embedding

Rongbin Li, W. Jim Zheng, Xiaoqian Jiang, Guocai Chen, and Avisha Das (UTHealth Houston McWilliams School of Biomedical Informatics)

Leveraging Large Language Models to Synthesize Clinical Diagnosis and Existing Pertinent Medical Research

Tristan Nguyen, Katherine Sheffield, Annie Tao, Adarsh Melukote, and Remington Crossnoe (The University of Texas Medical Branch); Manav Pandey (Trench)

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Shilpa Muralidhar, Anne Debuysree, and Mohan Pammi (Texas Children's Hospital)

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Remington Crossnoe, Tristan Nguyen, Katherine Sheffield, Annie Tao, and Adarsh Melukote (The University of Texas Medical Branch); Manav Pandey (Trench)

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Shifting Landscapes: The Impact of Fee-for-Service and Value-Based Care Models on Chronic Disease Management and Health Economics in the United States

Maleeha Ahmad (Texas A&M School of Medicine); Vibhav Jha and Dhini Nasution (ParaDocs Health)

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Salik Tehami, Summer Chavez, Cecilia Pham, Romi Govander, Lola Adepoju, and Winston Liaw (The University of Houston)

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Zachary Mendoza (Texas A&M School of Engineering Medicine)

The Right to Notice and Explanation of AI Systems in Healthcare

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Protecting Sensitive Biosignal Data in Model Training: Federated Learning for Healthcare Applications

Kai Malcolm and Momona Yamagami (Rice University)

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MRI-Based Automated Segmentation of Organs-At-Risk (OAR) for Glioma Radiotherapy Planning Using a 3D Convolutional Neural Network

Hesham Alghodhaifi, Satrajit Chakrabarty, Bikash Panthi, Victoria White, Holly Langshaw, and Caroline Chung (UT MD Anderson Cancer Center)

Foliations on Dirac manifolds, a Powerful Geometric Tool for Brain Tractography

Paul Camargo Toro and César Uribe (Rice University); Nicolás Martínez and Francisco Gómez (Universidad Nacional de Colombia)

Comparative Analysis of Sleep Scoring Methods for School-Aged Children

Khadija Zanna and Akane Sano (Rice University); Jenette Moreno (Baylor College of Medicine)

Exploring the Role of Comorbidities in Glioblastoma Survival: A Retrospective Cohort Study

Sanjana Mohanty, Kostiantyn Botnar, George Golovko, and Kamil Khanipov (The University of Texas Medical Branch at Galveston)

Metamorphosing Medicine: An Overview of the Integration of Artificial Intelligence in Digital Health

Bhavik Tadigotla (Rice University)

Artificial Intelligence for Precision Medicine in Preterm Infants

Rema Zebda and Mohan Pammi (Baylor College of Medicine); Nima Aghaeepour and Chi-Hung Shu (Stanford University)

Physics-Informed Neural Networks for Modeling Cardiovascular Dynamics

Amirmohammad Mohammadi, Kaan Sel, and Roozbeh Jafari (Texas A&M University)

Increasing Temporal Resolution of High-Throughput Phase Contrast Time-Lapse Microscopy via Deep Learning-Based Video Frame Interpolation

Kwan-Ling Wu, Melisa Montalvo, Badrinath Roysam, and Navin Varadarajan (The University of Houston)

Clustering of Melanocytic Lesions Correlates with Current Clinical Practice

Scott Heston (Texas A&M School of Engineering Medicine); Elizabeth Merlinsky (Baylor College of Medicine)



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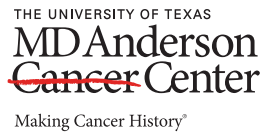
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