

Agenda: Morning Session

8:30-9:00

REGISTRATION

Registration: 1st Floor/Trayes Hall
Continental breakfast: 1st Floor/Trayes Hall
Research and Student Posters: 1st Floor/Trayes Hall
Exhibits: 1st Floor/Lobby

9:00-9:45

WELCOME

Matt Hale, President, NJBDA, Associate Professor, Seton Hall University
Stuart Shapiro, Dean, Rutgers Edward J. Bloustein School of Planning and Public Policy, Rutgers University
Francine Conway, Chancellor, Rutgers University-New Brunswick
Brian Bridges, Secretary of Higher Education, State of New Jersey

9:45-10:30

KEYNOTE ADDRESS: AI Impacts on Society

Sherry Marcus, Director, Amazon Bedrock Science, Amazon Web Services

Gen AI: Navigating the Transformative Era of Artificial Intelligence

We are faced with the unprecedented challenge and opportunity of navigating the transformative era of artificial intelligence, spearheaded by Generative AI (Gen AI). AI is ubiquitous and represents a seismic shift in how businesses operate, innovate, and interact with society. In this dynamic landscape, we must separate the facts from the hype, harness the potential, and mitigate the risks associated with AI-driven transformation.

10:30-10:45

BREAK AND NETWORKING

10:45-12:00

BREAKOUT SESSIONS

RESEARCH TRACK PROGRAM:

The symposium Research Track features presentations on applied research in Big Data, AI, and Machine Learning.

Research Track Chair: **Forough Ghahramani**, Assistant Vice President for Research & Innovation, Edge and Vice President for Research and Collaborations, NJBDA

RESEARCH SESSION 1: AI in Education

Location: 2nd Floor/Meeting Room B

Moderator: **Abhishek Tripathi**, Associate Professor, Department of Accounting and Information Systems, The College of New Jersey

Empowering Our Academic Community: Elevating AI Literacy and Integrating GAI Policies into the Syllabi

Shiang-Kwei Wang, Hostos Community College, CUNY

Leveraging Datacommons.org and Google Cloud: A Multi-Faceted Approach to AI in Education

Lukman Ramsey, Google Cloud

Large Language Model powered chatbot for educational institutions

Satish M. Srinivasan, Penn State Great Valley

Artificial Intelligence and Student Learning Success

Sonal Pandey, Rutgers University

RESEARCH SESSION 2: AI in Healthcare

Location: 2nd Floor/Meeting Room E

Moderator: **Bala Desinghu**, Senior Scientist, Office of Advanced Research Computing (OARC), Rutgers University

Achieving Fairness Certification with Differential Privacy

Hai Phan, New Jersey Institute of Technology

Enhancing the Performance of Large Language Models (LLMs) in Academic Knowledge Mining through Retrieval Augmented Generation (RAG)

Nishitha Chidipothu, Rutgers University, and **Richard Anderson**, Rutgers University

Innovative Application of Convolutional Neural Networks in Diagnosing Type II Diabetes Mellitus Through Voice Analysis

Mohammad Ali Saghiri, Rutgers School of Dental Medicine

AI-Powered Diagnosis of Malocclusions

Mohammad Ali Saghiri, Rutgers School of Dental Medicine

RESEARCH SESSION 3: Large Language Models and Deep Learning

Location: 2nd Floor/Meeting Room C

Moderator: **Hieu Duc Nguyen**, Professor, Department of Mathematics, Rowan University

Estimating Blueberry Crop Yield Using Deep Learning & Smart Drones

Brandon McHenry, Rowan University

How Did We Get Here? A Timeline of the Advancement of AI Through the Pages of Literature

Tina Nosrati, Ramapo College of New Jersey

Using Machine Learning and AI to Predict Eligibility, for Rental Assistance, in FEMA Programs

Rohith Sanku, Saint Peter's University

***A Novel RAG-Enhanced LLM Framework for Geoscientific Exploration:
Optimizing Question-Answering for Mineral Deposit Classification with Generative
AI***

Tanya Khanna, Rutgers University

RESEARCH POSTER SESSION

Location: 1st Floor/Trayes Hall

Analyzing Global Food Prices

Naga Vara Praveena Makineni, Saint Peter's University

***A Study on the Dark Sides of AI on the Future of Education: A Novel Classification
of Challenges Impacting Use Cases***

Ali Mohammad Saghiri, William Paterson University

***Leveraging Machine Learning for the Prediction of Dentin Quality Through Trace
Element Analysis***

Devyani Nath, Rutgers School of Dental Medicine

***Leveraging Hugging Face APIs for Sentiment Analysis and Insights from Customer
Reviews***

Konyala Anusha, Saint Peter's University

GENERATIVE AI – NLP & LLM WORKSHOP

Generative AI with NLP and Large Language Models – Interactive Python Workshop

Location: 3rd Floor Computer Lab

Facilitators: **Meng Ye**, Advanced Computer Scientist, SRI International, and **Jim Samuel**, Associate Professor, Bloustein School, Rutgers University

DESIGN JUSTICE AI PRESENTATION

Location: 2nd Floor/Douglass Lounge

Presented by: **Lauren Goodlad**, Distinguished Professor of English and Chair, Critical AI @ Rutgers, and **Matthew Stone**, Professor, Computer Science, Rutgers University

STUDENT POSTER SESSION

Location: 1st Floor/Trayes Hall

Session Chair: **Hieu Nguyen**, Professor, Mathematics, Rowan University

Panel of Judges:

- **Rajiv Kashyap** (Chair), Department Chair and Professor, Department of Marketing and Management Sciences, William Paterson University
- **Rashmi Jain**, Department Chair and Professor of Information and Operations Management, Feliciano School of Business, Montclair State University

- **Marina Johnson**, Assistant Professor, Information and Operations Management, Feliciano School of Business, Montclair State University
- **Mahesh Yadav**, Founder and CEO, Optima Global Solutions, Inc.

Poster Session Committee:

- **Rashmi Jain**, Department Chair and Professor of Information and Operations Management, Feliciano School of Business, Montclair State University
- **Rajiv Kashyap**, Department Chair and Professor, Department of Marketing and Management Sciences, William Paterson University
- **Hieu Nguyen**, Professor, Mathematics, Rowan University
- **Demetrios Roubos**, Associate Director, Information Security, Stockton University
- **Jim Samuel**, Associate Professor, Bloustein School, Rutgers University
- **Jay Singh**, Account Director, Broadcom Software

Agenda: Afternoon Session

12:00-1:00 Lunch, Networking, Exhibits, Awards

Location: 1st Floor/Trayes Hall

Posters: 1st Floor/Trayes Hall

Exhibits: 1st Floor/Lobby

Awards

Best Student Poster Awards

Journal of Big Data and Artificial Intelligence – Best Paper Awards

All afternoon sessions will take place in the 1st Floor/Trayes Hall.

1:00-1:45 KEYNOTE ADDRESS: AI Impacts on Higher Education

Shiren Vijiasingam, Chief Product Officer, Instructure

The (r)evolution of AI in Education

AI has been a leading topic of discussion for several years now. With the evolution of AI usage across multiple industry sectors, there is a growing demand for AI expansion into the higher education market. This presentation will focus on the growing role of AI in the learning experience. Where is AI going? how is it defined? and how can academic institutions harness the value of change that AI brings for students, faculty, and industry?

1:45-2:30 PANEL DISCUSSION: AI Skills for a Transforming Workforce

In today's rapidly evolving digital landscape, AI is playing a transformative role in reshaping industries and redefining job roles. As organizations increasingly adopt AI technologies, the demand for a skilled workforce equipped with AI capabilities is on the rise. This industry panel will explore the essential AI skills and competencies needed to thrive in the workforce of tomorrow.

The panelists will discuss emerging AI technologies, critical skills such as data analysis and ethical AI practices, and strategies for bridging the AI skills gap. Join us to gain valuable insights into navigating and excelling in an AI-driven future.

Rashmi Jain (Moderator), Professor and Chair, Department of Marketing and Management Sciences, William Paterson University

Panelists:

- **Melanie Murphy**, former Chief Analytics Officer, Fluent
- **Sriram Sridhar**, Director, Translational Data Science, Genmab
- **Justin Trugman**, Cofounder & Head of Technology, BetterFutureLabs
- **Doug Vargo**, Vice President, Consulting Services, CGI

Panel Organizing Committee:

- **Rashmi Jain**, Department Chair and Professor of Information and Operations Management, Feliciano School of Business, Montclair State University
- **Sho Islam**, Division Head for Life Sciences and Food Innovation, Middlesex County
- **Doug MacDonald**, Technology Sector Lead, New Jersey Economic Development Authority
- **Jim Samuel**, Associate Professor, Bloustein School, Rutgers University
- **Joe Suppers**, President, Global Sales and Marketing, Swiss Vault

2:30-2:45 **BREAK AND NETWORKING**

2:45-3:30 **PANEL DISCUSSION: AI Impacts on Teaching, Research, and Society**

The expansion of AI will change fundamental aspects of higher education and research. Everything from grading to lecture formats to data collection, management, and analysis will be changed because of AI. This panel will explore ways that AI challenges our long-standing approaches to teaching, research, and engagement in society.

Matthew Hale (Moderator), Associate Professor and MPA Program Chair, Department of Political Science and Public Affairs, Seton Hall University

Panelists:

- **Vishal Misra**, Vice Dean & Professor of CS and AI, Columbia University
- **Juan Rios**, Assistant Professor, Social Work Program, Seton Hall University
- **Wade Trappe**, Associate Dean of Academic Programs and Research, Professor of Electrical and Computer Engineering, School of Engineering, Rutgers University
- **Sonia Yaco**, Digital Initiatives Librarian, Rutgers University

Panel Organizing Committee:

- **Matthew Hale**, Associate Professor and MPA Program Chair, Department of Political Science and Public Affairs, Seton Hall University
- **Peggy Brennan-Tonetta**, Director, Resource and Economic Development, New Jersey Agricultural Experiment Station, Rutgers University
- **Rajiv Kashyap**, Professor and Chair, Department of Marketing and Management Sciences, William Paterson University
- **Susan Oldenburg**, Geographic Information Systems Specialist, Office of Advanced Research Computing, Rutgers University
- **Jim Samuel**, Associate Professor, Bloustein School, Rutgers University

3:30 **CLOSING REMARKS**

Jim Samuel, Associate Professor and Executive Director, Data Informatics Program, Bloustein School, Rutgers University; Editor-in-Chief, JBDAI – Journal of Big Data and Artificial Intelligence (JBDAI)
Peggy Brennan-Tonetta, Co-founder and Past-President, NJBDA, Director, Resource and Economic Development, New Jersey Agricultural Experiment Station, Rutgers University
Matthew Hale, President, NJBDA, Associate Professor, Seton Hall University