# 2025 STEM Symposium

## Clayton State University - College of Science Technology Engineering and Mathematics

The College of Science Technology Engineering and Mathematics at Clayton State University held their 4th annual Symposium "AI driven Quantum Leap in Science and Technology" in March of 2025. The two-day event focuses on AI driven Quantum Leap in Science and Technology and featured presentations by guest industry speakers, faculty, and current students, plus panels covering topics for both current students and alumni. The Symposium hosted over 800 students, faculty, alumni, and industry leaders. The Symposium helped create undergraduate scholarships for CSU students in STEM.

#### **Key Note Speakers:**



Representative Regina Lewis-Ward was elected to the Georgia General Assembly in 2020 and serves the 115th District, which includes parts of Henry and DeKalb counties. A native of Brooklyn, New York, she holds a Master of Arts in political science from Clayton State University, a Bachelor of Business Administration in computer systems from Bernard M. Baruch College, and an Associate of Applied Ścience in data processing from LaGuardia Community College. Representative Lewis-Ward has a diverse background and experience spanning decades, working with emerging data processes across multiple environments.

She began her professional journey in 1982 as a programmer analyst with the NYC Landmarks Preservation Commission, where she developed systems for efficiently storing and retrieving data related to artifact preservation. Later, she designed and implemented automated employee time and leave management systems at the NYC Transit Authority, improving record keeping and paycheck accuracy. After moving to Georgia, Representative Lewis-Ward collaborated with Georgia Tech's Enterprise Innovation Institute and the Advanced Technology Development Center in 2016 to evaluate and pilot a technology incubator to support small businesses in the region. Building on her experience in technology, Rep. Lewis-Ward channels her efforts into academic research, focusing her dissertation on The United States Federal Government and lags in protecting personally identifiable information.

Representative Lewis-Ward commits deeply to using innovative technologies to drive progress, promote growth, and encourage sustainable development in both business and community initiatives.



Kishore Nimmagadda is a cloud transformation leader with a solid track record of driving business growth, customer success and building customer centric high performance engineering teams.

Experience: Kishore leads the Infrastructure Modernization, Professional Services team at Google Cloud responsible for delivering large scale cloud and data center transformation programs and ensuring customers realize business value with Google Cloud adoption. My current role includes 1) building, scaling and leading high performing technical teams in the Americas region 2) developing cloud strategy and leading solutions delivery for customers and 3) building strong customer relationships by helping them realize business value.

Prior to Google, Kishore spent 10 years in business consulting, software engineering and technical solutions delivery. His experience includes business consulting engagements with F500 companies such as Salesforce, MetLife, and InterContinental Group and software engineering with central information technology organization at The University of

Personal: I live in the Atlanta area (US Southeast), married with two children, fluent in 3 languages, enjoy cooking, running



**Ryan Henson** is a Clayton State alumnus, graduating with a degree in Computer Science in the summer of 2016. During his time at Clayton State, he spent 2 years working in the Hub, before completing an internship at what was then Turner Broadcasting, which has since become (WBD) Warner Brothers Discovery. He's spent the last 9 years working in several capacities there, helping to provide engineering support for the live news and sports production teams based out of the company's Atlanta headquarters on Techwood Drive in Midtown Atlanta.

Currently he manages the GCC (Global Command Center) which is tasked with providing tier 1 engineering support for the company's global footprint of live broadcast facilities. However, when he's not at work, he enjoys working on projects around his house, and spending time with his family and dogs.







Thank you to our 2025 symposium sponsors and partners!

CLAYTON STATE



College of Information d Mathematica (CIMS)



2025 STEM Faculty of the Year Award-Dr. Tatiana Krivosheev Physics Professor

## Athletic Center- Loch and Mason Barfield Court- 2000 Clayton State

8:00am-9:00am	Event Check-In	Athletic Center
9:00am-9:30am	Welcome Host:Jaelynn Perry	Dean: Dr. Ebrahim Khosravi President: Dr. Georj Lewis Provost: Dr. Jill Drake
9:30am-10:00am	Keynote Speaker	Regina Lewis-Ward- Georgia General Assembly House of Representatives
10:00am-10:20am	Student Presentation	Brittany Hernandez, Celso Fuentes, Katelyn Hayes, Roger Kackowski-Smith, and Dave Mastin
10:20am-10:50am	Industry Partner Presentation	Thomas Blake- Metro Atlanta Chambe
10:50am-11:10am	Student Presentation	Antania Bivens, Bemice Santana, Nadia Macias-Rodriguez, Amylynn Bui, Melissa Mendoza-Mora, Shannice Soleyn-Meyers
11:10am-11:40pm	Industry Presentation	William Orgertrice- Before the Billion
11:40pm-12:00pm	Faculty Presentation	Dr. Ken Nguyen
12:00pm-1:00pm	Lunch	On Your Own
12:00pm-1:00pm	STEM Advisory Council Meeting By Invitation	Dean's Conference Room
1:00pm-2:00pm	Student Poster Session	College of STEM Students
2:00pm-3:00pm	Industry Leader Panel	Joe Uhl- Mail Chimp/ Intuit, Willaim Orgetrice- Before the Billions, Tanner Cox-Warner Brother, Ashlee Gregory- Break through Tech, JB Byers- Truist, Thomas Blake- Metro Atlanta Chambe
3:00pm-3:15pm	Break	
3:15pm-3:45pm	Industry Partner Presentation	Brandon Perry- ADP
3:45pm-4:05pm	Faculty Presentation	Dr. Jere Boudell
4:05pm-4:30pm	Student Presentation	Zion Clery
4:30pm	Symposium Day 1 Closing	Dean Khosravi and Chairs

#### Symposium Banquet and Awards

The Loch and Mason Barfield Court : Athletic Center 2000 Clayton State BLVD Morrow, GA 30260

Kishore Nimmagadda- Consulting March 26, 2025 - 5:00pm-7:30pm Dean: Dr. Ebrahim Khosravi Awards and Recognition

#### College of STEM 20th Annual Student Awards

#### Information Technology Outstanding Scholar Award:

AASIT: Kevin Perez-Farret

BIT: Willie White

#### Computer Science Outstanding Scholar Award:

Billy R. Nail Mathematics Award:

#### Billy R. Nail Mathematics Scholarship:

Elisabet Isleifsdottin

#### O.C. Lam III Award for Excellence in Biological Sciences

#### The Jim Braun Award for Excellence in Chemistry

#### Catherin Aust Award for best All- Around CIM/CSTEM Major:



**Student Awards Banquet** 

## Symposium Highlights

Faculty, Staff & Student Presentation

Abstract. High Energy Physics (HEP) is a field that has still has many mysteries that need to be solved. An open question is about the origin and composition of the Ultra-high Energy Cosmic Rays (UHECRs). These cosmic rays originate well outside our planet, may even be outside of the galaxy. They are messengers that could help us better understand the universe around us and provide insight into the fundamental building blocks of our universe. The primary goal of the Detector of Unusual Cosmic casKades, is to detect and verify the existence of unusual cosmic events. Moreover, it can help innovate EAS

(Extensive Atmospheric Shower) analysis methods. This poster aims to highlight developments of the detector system, instrument calibrations and other activities conducted at Clayton State University. Dmitriy Beznosko, Valeriy Aseykin, Alexander Dyshkant, Fernando Guadarrama, Alexander Iakovlev, Oleg Krivosheev, Tatiana Krivosheev, Alexander Ramirez, Vladimir Shiltsev, Xuong Minh Tran, and Valeriy Zhukov. "Construction progress of Detector of Unusual Cosmicray casKades",

• Abstract.Newton's Method is an iterative technique that uses tangent lines to approximate roots of real-valued, differentiable functions. This paper explores the method's application as a strategy for finding real roots when exact solutions are difficult to obtain algebraically. The method was implemented in Python and applied to a variety of functions, including a low-degree polynomial, a high-degree polynomial, a trigonometric function, and an exponential function. The approximation process starts by evaluating each function at integer values between –10 and 10. If a function evaluated to zero at any of these values, a root is found immediately. Otherwise, the Intermediate Value Theorem is used to locate intervals where the function changed sign, indicating the presence of a root. One of these values is then selected as an initial approximation for Newton's Method. Using the iterative formula, each initial guess is refined to converge toward the actual root. The method produced accurate approximations across all function types when an initial guess was sufficiently close to the true root, demonstrating the efficiencyof Newton's Method in iterative root-finding. Christopher Raridan, Spencer Roberson, and Alexa Roberts. "Implementing Newton's method in python for root-finding in differentiable functions",



Over 800 guests were in attendance at the STEM 4th Annual Symposium!

Industry partners, community leaders, CSU faculty, staff, students and southern Atlanta high schools.





Industry Partner Presentation
ADP, Before the Millions, Metro Atlanta Chamber



#### Industry Partner Panel

Joe Uhl- Mail Chimp/ Intuit,Willaim Orgetrice- Before the Billions, Tanner Cox-Warner Brother, Ashlee Gregory-Break through Tech, JB Byers- Truist, Thomas Blake- Metro Atlanta Chamber





## Thank You! Planning Team Symposium Planning Committee

Dr. Ebrahim Khosravi **Director**, Penelope Cliff **Committee Chair** <u>Committee Members:</u> Genesis Polo, Christopher Morgan, Dr. Elliot Krop, Dr. Shuju Bai, Dr.Paul Melvin, William Carroll, Dr. Dmitriy Beznosko, Dr.Christopher Raridan, Dr. Ken Nguyen,Dr. Keith Driscoll.



### CSU Alumni Panel

CSIT: **Darshan Patel** Mathemetics: **Sarah Hogate** Master of Archival Studies: **Ashley** 

Bennett

Biology: Jose Munoz

Thursday, March 27, 2025. K-12 STEM Exploration The Loch and Mason Barfield Court: Athletic Center 2000 Clayton State BLVD Morrow, GA 30260

Event Check-in	Athletic Center
Welcome Host: Yulisa Govea-Morales	Dean: Dr. Ebrahim Khosravi President of Clayton State University- Dr. Georj Lewis Enrollment Marketing and Student Success- Dr. Ashlee Spearman
Keynote Address	Ryan Henson- Warner Brothers
STEM Programs and Scholarships	Department ChairofMathematics: Dr. Elliot Krop Department Chairof ComputerScience: Dr. Shuju Bai Biology/Chemistry/Physics: Dr. Paul Mehvin
CSTEMSS Student/Alumni Panel	CSIT & Mathematics,Archives Physics,Chemistry,Biology
Enrollment Information	Admissions, Financial Aid Housing
STEM Activities	Campus Tour Exploration Stations
Farewell with Lunch	Dean Khosravi & Symposium Chairs Athletic Center
	Welcome Host: Yulisa Govea-Morales  Keynote Address  STEM Programs and Scholarships  CSTEMSS Student/Alumni Panel  Enrollment Information  STEM Activities

#### **K-12 STEM Exploration Stations**



High School students got a taste of the different STEM programs through robotics, mathematical games, chemistry, biology and physics stations



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