

2024 STEM Symposium

Clayton State University - College of Information and Mathematical Sciences

The College of Information and Mathematical Sciences at Clayton State University held their third annual Symposium "Advancing Social Mobility Through STEM" in March of 2024. The two-day event focuses on advancing social mobility through STEM and will feature presentations by guest lecturers, faculty, and current students, plus panels covering topics for both current students and alumni. The Symposium hosted nearly 800 students, faculty, alumni, and industry leaders. The Symposium helped create undergraduate scholarships for CSU students in STEM.

Key Note Speakers: **Commissioner Jerica Richardson** represents the eastern part of Cobb County which includes Smyrna, Vinings, East Cobb, Cumberland CID, and other parts of unincorporated Cobb County. Her platform is predicated on the idea that when we are connected, we can empathize, and overcome any challenge. Being a diverse metro county, her primary goal is to use the challenges the county faces to elevate conversations that communities around the country should be having. Such challenges on the horizon include rapid and diverse growth, balancing development demands, environmental stability and technology, discrimination, trust in law enforcement, recession-proofing the community, and long-term wealth gaps and inequality. She believes in working closely with the community and that there are only permanent interests in advancing public welfare. As a private citizen, Jerica is a Georgia Tech graduate in Biomedical Engineering, and works full time as a Program Manager at Equifax. She is also a small business owner and author.



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Shane Bell is a Georgia native who grew up near Atlanta. He earned a bachelor's degree in history and a Master of Arts in Liberal Studies from Clayton State University. Shane worked for The National Archives as a student employee beginning in 2007 and joined the agency full time in 2011. In his years with NARA, Shane gained experience working with a wide variety of federal records and performing numerous duties in the archival field. His main areas of focus include records from NASA and the Atomic Energy Commission. He has compiled finding aids for federal holdings related to The War of 1812, the 19th century illegal slave trade, the Civil War, The Manhattan Project, and 20th century science and technology. In 2022 Shane became NARA's Subject Matter Expert (SME) archivist for agency-wide NASA and related records.



David Byrd is an accomplished leader and technical executive focused on driving customer success at global enterprise clients via cloud, hybrid, and on-premises solutions. He is a Georgia native and alumni of Clayton State University. David has been at Google Cloud for three years as the Global Lead for Assured Support and Cloud Support Atlanta Site Lead. Before his current role with Google, David was a Distinguished Engineer at IBM for over 20 years. Throughout David's three-decade career, he has had the opportunity to travel the world working with a wide range of customers. He has co-authored numerous technology books and presented at various global events.



Thank you to our 2024 symposium sponsors and partners!!



CLAYTON STATE UNIVERSITY

College of Science Technology Engineering and Mathematics (STEM)

3rd ANNUAL Symposium

Advancing Social Mobility Through STEM

REGISTER TODAY!

MARCH 27: RESEARCH AND CAREER DEVELOPMENT

MARCH 28: K-12 STEM EXPLORATION



2024 STEM Faculty of the Year Award-Dr. Jere Boudell- Biology Professor

Athletic Center- Loch and Mason Barfield Court- 2000 Clayton State BLVD. Morrow, GA 30260

Time	Event	Location/Host
8:00am-9:00am	Event Check-In	Athletic Center
9:00am-9:30am	Welcome Host: Joshua Roca	Dean: Dr. Ebrahim Khosravi President: Dr. Georj Lewis Symposium Chair Welcome
9:30am-10:00am	Keynote Speaker	Cobb County Commissioner: Jerica Richardson Joshua Roca & Anna Marie Tinsley Conversational Sentiment
10:00am-10:20am	Student Presentation	Brandon Perry & Bryce Robinson- ADP
10:20am-10:50am	Industry Partner Presentation	Jonathan Clement Automotive Farming Project
10:50am-11:10am	Student Presentation	Atlanta Gas Light- Wilkin Lara Mateo & Dennis L. McGouirk
11:10am-11:40pm	Industry Presentation	Dr. David Plaxco
11:40pm-12:00pm	Faculty Presentation	On Your Own
12:00pm-1:00pm	Lunch	On Your Own
12:00pm-1:00pm	STEM Advisory Council Meeting By Invitation	Athletic Center Meeting Room
1:00pm-2:00pm	Student Poster Session	College of STEM Students
2:00pm-3:00pm	Industry Leader Panel	Brandon Perry ADP, Justin Haight, Metro Atlanta Chamber, Shane Bell, Nara Jonathan Kyle, Intel, Wilkin Lara Mateo & Dennis McGouirk, Atlanta Gas Light David Byrd- Google
3:00pm-3:15pm	Break	
3:15pm-3:45pm	Industry Partner Presentation	David Byrd- Google
3:45pm-4:05pm	Faculty Presentation	Dr. Clint Edmunds
4:05pm-4:30pm	Student Presentation	Kossi Sessou Digital Bulletin Board
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

Keynote Address: David Byrd
March 27, 2023 - 5:00pm-7:30pm Awards and Recognition Dean: Dr. Ebrahim Khosravi

- College of STEM 19th Annual Student Award**
- Information Technology Outstanding Scholar Award:**
 - AASIT- Jonathan Clement
 - BIT- Lucas Cao
- Computer Science Outstanding Scholar Award:**
 - BSCS- Anna Marie Tinsley
 - Annita Hunt Award: Oluwadamilola Adesiyin
 - Billy R. Nail Mathematics Award: Yulisa Govea-Morales
 - Billy R. Nail Mathematics Scholarship: Yulisa Govea-Morales
 - The Rising Senior Award: Lucia Campos
 - O.C. Lam III Award for Excellence in the Biological Sciences: Raniah Al Juboori
 - Jim Braun Award for Excellence in Chemistry: Clayton Garcia
 - Freshman Chemistry Award: Michael Jones
 - Recognition of Dean's List Students: Dr. Ebrahim Khosravi
 - Catherine Aust Award for the Best All- Around CIMS Major: Anna Marie Tinsley



Student Awards Banquet

Symposium Newsletter

Faculty, Staff & Student Presentation

Impact of Different Trace Minerals on the Growth of Escherichia coli and Streptococcus agalactiae -Brittany Prosser, Clint Edmunds, PhD and Vivian Padin-Irizarry, PhD

- **Abstract:** Gut health and gut health microbiota are leading topics of research, especially in the fields of human and animal nutrition. Data has shown that certain trace minerals have an impact on the growth of normal gut flora and pathogenic bacteria. Our goal is to use Escherichia coli and Streptococcus agalactiae to investigate what concentrations of different trace minerals (iron, copper, zinc, and manganese) have an impact on in vitro bacterial growth. These specific bacteria were chosen based on their relevance to human and animal health....

Faculty, Staff & Student Poster Presentation

Edge Detection in RGB Images using the Discrete Wavelet Transform -Jillian Morgan and Michael Weeks, Georgia State University

- **Abstract:** Edge detection is an important first step in image processing applications. There are many methods for edge detection with grayscale data. This work explores extracting edge information using the Discrete Wavelet Transform (DWT) on an RGB image, by treating each color plane separately and then combining the results. In doing so, we find that different edges are produced when compared to previous approaches using grayscale data.



Thursday, March 28, 2024. K- 12 STEM Exploration

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

9:00am-9:30am	Event Check-in	Athletic Center
9:30am-9:45am	Welcome Host: Anna Marie Tinsley	Dean: Dr. Ebrahim Khosravi VP for Enrollment Marketing and Student Success- Ashlee Spearman
9:45am-10:15am	Keynote Address	Nara's Subject Matter Expert (SME) Archivist- Shane Bell
10:15am-10:30am	STEM Programs and Scholarships	Department Chair of Mathematics: Dr. Elliot Krop Department Chair of Computer Science: Dr. Shuju Bai Biology/Chemistry/Physics : Dr. Paul Melvin, Aubrey Dyer, Dmitry Beznosko
10:30am-10:45am	CSTEMSS Student/Alumni Panel	CSIT & Mathematics, Archives Physics, Chemistry, Biology
10:45am-11:00am	Enrollment Information	Admissions Financial Aid Housing
11:00am-12:45pm	STEM Activities	Campus Tour STEM Competition-UC327 Exploration Stations
12:45pm-1:30pm	Farewell with Lunch	Dean Khosravi & Symposium Chairs Athletic Center

Over 800 guests from industry partners, community leaders, CSU faculty, staff, students and south Atlanta high schoolers were in attendance at the STEM 3rd Annual Symposium!



Industry Partner Presentation

Google, Atlanta Gas Light, ADP

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



WWW.CLAYTON.EDU/CIMS/SYMPOSIUM



Selected Industry Partner Panel

Brandon Perry- ADP, David Byrd- Google, Jonathan Kyle- Intel, Shane Bell NARA, Justin Haight- Metro Atlanta Chamber, Dennis McGouirk- Atlanta Gas Light

Thank You! Symposium Planning

Committee

Penelope Cliff Committee Chair, Louisa Catalano, Committee Chair, Ebrahim Khosravi, Committee Member, Genesis Polo, Committee Member, Christopher Morgan, Committee Member, Dr. Elliot Krop, Committee Member, Shuju Bai, Committee Member, Esther Fontin, Committee Member, William Carroll, Committee Member, Dmitry Beznosko, Committee Member, Clint Edmunds, Committee Member, Connor Wright, Committee Member, Cassandra Parker, Committee Member