

# NEWSLETTER

## Spring 2025- Volume 4

### Clayton State University-College of Science Technology Engineering & Mathematics(CSTEM)

#### Faculty Spotlight

We are proud to announce that **Dr. Tatiana Krivosheev** has been named the Faculty of the Year in the College of STEM. This prestigious award recognizes a faculty member who demonstrates an exceptional record of achievement in grant funding, scholarly activity, university service, and student engagement. Dr. Krivosheev's dedication to excellence in all these areas exemplifies the highest standards of academic and professional commitment. Please join us in celebrating her outstanding contributions to our college and community!



Congratulations to **Dr. Shuju Bai**, Clayton State University's 2025 Faculty Champion of the Year! We are proud to recognize Dr. Bai for her outstanding support of the Office of Career & Professional Development. Her dedication to student success & commitment to career readiness have made a lasting impact on our campus community.

We are thrilled to announce that **Dereck Mosley**, our esteemed professor of archival studies, has been elected as the vice-president and incoming president of the Society of American Archivists. This prestigious recognition highlights



**Dr. Jere Boudell**, a distinguished professor in Biology, has successfully organized and led multiple app development hackathons over the past decade. These events have provided invaluable hands-on experience and fostered innovation among participants, further enhancing our community's technological and scientific expertise. It focused on addressing environmental issues with MIT



#### New Faculty and Staff

Please join us in welcoming Dr. Jere Boudell as our new Associate Dean. Dr. Boudell brings a wealth of experience, a deep commitment to academic excellence, and a passion for student success. We are also pleased to welcome Dr. Emily Surber as our new Chemistry and Physics Coordinator. Dr. Surber's expertise and dedication to the sciences will play a key role in strengthening our STEM programs and supporting our faculty and students in these critical disciplines.

#### Grants

1. Akhtar, S. (2023 - 2025) "Collaborative Research: CISE-MSI: RCBP-RF: CNS: ESD4CDaT – Efficient Design for Cancer Detection and Treatment," NSF (\$131,290.00).
2. Bai, S., & Qu, J. (2023 - 2028) "Artificial Intelligence Study in Earth Exploration Summer Academy," NASA (\$425,000.00).
3. Beznosko, D (2024-2025 "Affordable Learning Georgia Affordable Materials (\$10,000)
4. Khosravi, E. (2025-2026) "Google X CSU Education and workforce readiness programming"(\$250,000)
5. Khosravi, E. (2024-2025) "Coca-Cola First Generation scholarship program" (\$1,000,000)
6. Khosravi, E. "NSF 25-514: Clayton State University's CRESS Program". (\$1.3M)
7. Beznosko, D. LEAPS-MSP: Development, Design and Construction of D.U.C.K. (Detector system of Unusual Cosmic-rays casKades), NSF, Federal, 130854, Funded – September 2023 to September 2025
8. College of STEM Mini grant for equipment totaling (\$7,278).- Stephen Burnett, Ken Nguyen, Jere Boudell, Dmitriy Beznosko, Tatiana Krivosheev, Byron Jeff, Muhammad Rahman, Stephen Klusza.

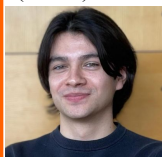
#### Student Spotlight

CSU Association for Computing Machinery (ACM) Congratulates Terkaa Chia on Earning Security+ Certification! Fall 2024 ACM student teams won the first and the second places undergraduate paper category



The 66th ACM MSE Conference- The ACM MSE conference was held on November 14-15 2024 in Gatlinburg, TN. ACM students had three group presentations at the conference. In the poster category our CSU student team won the first place, In the undergraduate paper category our CSU student teams won the first and the second places

Tuesday, April 29, Kendall Barksdale, a Master of Archival Studies (MAS) student, attended the Clayton State Retirees Association (CSRA) 11th Annual Luncheon and delivered a fantastic presentation. We are thrilled to announce she has been awarded the Clayton State Retirees Association (CSRA) Graduate Student Scholarship for 2024-2025!



We are thrilled to announce that Evan Castillo, a dedicated Mathematics and Computer Science double major, has successfully passed the Society of Actuaries Probability Exam this January!

A team of nine talented students from the CSIT department, under the guidance of Dr. An achieved remarkable success at the 2024

NASA MINDS competition- The team proudly secured a spot among the top 5 finalists in the Underclassman Teams category. Additionally, they earned 3rd place in the Technical Posters Award and received an Honorable Mention for their championship design, build and demonstrate.



#### College Events

**The Launchpad Leadership Academy**- hosted their 1st annual networking event on October 24, 2024. Companies from Intel, Travelers Insurance, Warner Brothers, Truist and Metro Atlanta Chamber, faculty, staff, CSU students and guests, were all in attendance. The purpose for this event is to create an environment for our students to learn about different industry and to give industry partners the opportunity to meet and network with the students of Clayton State University.



**4th Annual Symposium**- On March 26 & 27 2025, the college of STEM hosted their 4th annual symposium. The theme for 2025 was "AI driven quantum leap in science and technology".

At the **Spring 2025 School of Sciences Experiential Learning Forum** on Friday, May 2, 2025, 104 students came together to present on their projects ranging from internship to research to teaching in both biology and chemistry. Also represented were the Coke scholars and the Learning Assistant Program. Overall, there were 31 posters sponsored by 8 faculty members. The science faculty served as judges for the work. Students took turns in 45-minute-long sessions as presenters and audience members.

**Atlanta Science Festival**- Hosted by Reynolds Nature Preserve in collaboration with Clayton State University, this exciting event took place on March 8, 2025. Attendees of all ages had the opportunity to explore the wonders of nature through interactive activities and educational experiences. The botanical illustration workshops were led by Professor of Biology Dr. Jere Boudell and faculty emerita Dr. Barbara Musulf.

**Laker STEM Sisters presents Networking Tea Party**- On April 23rd, the Lakers STEM sisters hosted their networking tea party with guest from 6 different industry professionals to enjoy delightful refreshments and one-on-one conversations.



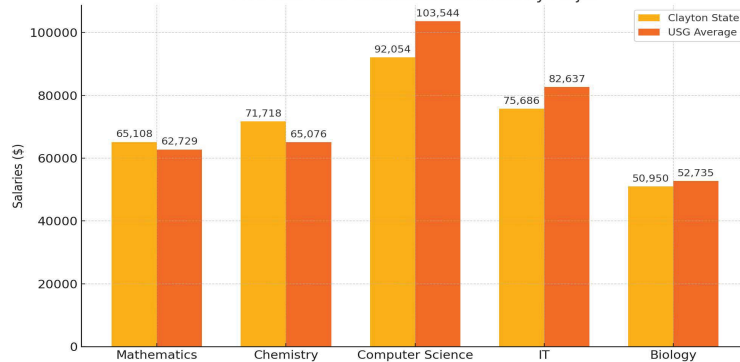
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The College of STEM at Clayton State University demonstrates strong performance in graduate earnings compared to other USG institutions. Mathematics graduates rank 3rd among 19 institutions with an average salary of \$51,315 one year after graduation (11.8% above the USG average) and continue to perform well with a 5-year average salary of \$65,108, also above the USG benchmark. Chemistry graduates show impressive early momentum, ranking 4th out of 18 institutions with \$41,907 after one year and climbing to 3rd place after five years with \$71,718 (10.2% over the USG average). Computer Science graduates start strong with high early-career earnings of \$52,248 and sustain strong momentum over five years with \$92,054 in average salary. Information Technology alumni also stand out, earning \$56,360 one year after graduation and maintaining competitive earnings of \$75,686 at the 5-year mark and \$96,075 after ten years. Biology graduates from Clayton State begin above average at \$32,825, and continue progressing to \$50,950 at five years and \$71,917 at ten years..

Five-Year Post-Graduation Salaries by Major



## Publications

Cliff, P. D., Review: Museum Archives: Practice, Issues, Advocacy. Society of American Archivists. 2024

Akhtar, S., & Wyne, M. (2024). Machine Learning Models for Skin Cancer Detection. Proc International Conference on Computational Science and Computational Intelligence (Concurrent Session on Artificial Intelligence).

Beznosko, D., Driscoll, K., Guadarrama, F., Iakovlev, A., Mai, S., & Thornton, N. (2024). Design and testing of photon-based hardware random number generator. Proceedings of 42nd International Conference on High Energy Physics—PoS(ICHEP2024) (pp. 1215). Sissa Medialab.

Akhtar, S. (2024). A Project Based Embedded Systems Course. Proc of Advanced Teaching Instructions and Learning (ICATIL - 24) Conference. Driscoll, K., & Quick, L. M. Self-regulatory Strategies to Improve Problem- Solving

## ITEMS SUBMITTED FOR PUBLICATION

Akhtar, S., Shahzad, Y., Qazi, S., Parvez, H., Fahad, M., & Beenish, H. Online Proctoring system with Fingerprint and Eye Recognition Using Siamese Network. Journal of Circuits, Systems, and Computers.

Driscoll, K. All trees are seven-cordial. The Application of Graphs.

Nancy, N., Sullivan, E., Snodgrass, L., & Addison, S. Danceability, A New Definition of Bridge Index.

## 2024-2025 STEM Advisory Council

Ken T. Takekawa, TDK, David Byrd, Google, Brandon Perry, ADP, Justin Haight, Metro Atlanta Chamber, Michael Olajubutu, Georgia Power

## New and Upcoming Programs

We're excited to introduce a dynamic lineup of new and upcoming programs designed to equip students with the skills and knowledge needed to thrive in today's fast-paced, tech-driven world:

**Certificate in Artificial Intelligence, Certificate in Cybersecurity, Bachelor of Science in Cybersecurity**

**(Coming Soon!) Bachelor of Science in Computer Engineering**

These programs are built with industry relevance in mind, taught by experienced faculty, and designed to support your career goals.

## A Workforce Exploration Experience

**Google Sprintership-** Five talented students from the College of STEM—Aunesty Moreland, Janki Patel, Jasmine Heath, Marija Dacosta, and Yulisa Govea-Morales—recently completed an exciting 3-week Sprintership at Google! During their time at Google, they: Developed a Proof-of-Concept using Google Cloud Platform to identify equipment symbols in diagrams, participated in technical workshops on interview prep, resume building, and career mapping, gained hands-on experience and mentorship from industry professionals. We're so proud of their innovation, teamwork, and growth!



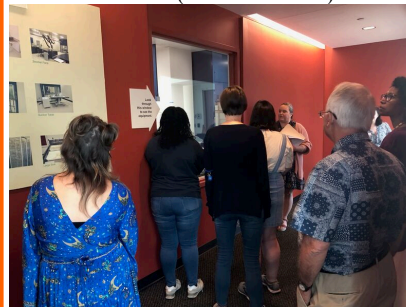
**The First Generation Coca-Cola Cohort students**, which consist of 42 students, visited the Coca-Cola Head Quarters on October 28, 2024. Students were given a tour of their daily operations, the technology they use, their IT project management, their practices of cybersecurity, and the type of computer languages they use.



**Exciting Tour at AJC!** Allison Schein, Director of Archives and Rights Management at the Atlanta Journal-Constitution (AJC) along side Penny Cliff, the Director of Archives and Information Studies program, led a group of archivists on an insightful tour of the AJC's new newsroom and studio at Promenade Central along Peachtree Street in Midtown.

## 2025 Behind-the-Scenes Tours at the Georgia Archives and NARA at Atlanta.

Each semester, the Clayton State University Master of Archival Studies (MAS) program offers behind-the-scenes tours at the Georgia Archives (state archives) and NARA at Atlanta (federal archives).



## Biology Cohort Gives Back: Jesters Creek

**Cleanup-** The Biology Cohort of the Coca-Cola Scholars Program recently took action to support our local environment by organizing a cleanup of Jesters Creek. Students worked together to remove litter and debris from the stream, helping to restore the health and beauty of this vital local waterway. Their efforts reflect a strong commitment to environmental stewardship and community engagement





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## Student Awards

Every spring semester our college holds a student award ceremony to celebrate our students and recognize their achievements. This spring on March 26th 2025, we held our 20th annual student award ceremony. We awarded 10 prestigious awards to our outstanding scholars:

### **Information Technology Outstanding Scholar Award:**

AASIT- Kevin Perez-Farret, BSCS: Celso Fuentes, BIT: Willie White

### **Annita Hunt Award:**

Yecenia Hernandez-Moreno

### **Billy R Nail Mathematics Award:**

Spencer Roberson

### **Billy R Nail Mathematics Scholarship:**

Terrance Favaro

### **The Rising Senior Award:**

Elisabet Isleifsdottir

### **The Helen Davis Brown Endowed Scholarship for Biology:**

Jordan Brown

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

Folarin Akinyode

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

Marija Dacosta

### **The CRC Press Chemistry Achievement Award:**

Ebere V. Onuchukwu

### **Catherine Aust Award for the Best All-Around STEM Major:**

Yulisa Govea- Morales



## 4th Annual Symposium



4th annual symposium industry panel: Joe Uhl: Mail Chimp/ Intuit, Tanner Cox: Warner Brother, JB Byers: Truist, William Orgertrice: Before the Billions, Thomas Blake- Metro Atlanta Chamber

### Industry Partners

Mailchimp/ Intuit, TDK, Google, ADP, Henry County Schools, Intel, Cobb County Commissioner, Coca-Cola, Atlanta Technical College, Associated Credit Union, Colonial Pipeline, Costco Business Center, Georgia Power, Atlanta Gas Light, COX Enterprise, NARA, Metro Atlanta Chamber, Clayton County ITS, Delta.

Thank you to our industry partners who are committed to providing our students with opportunities of growth professionally, personally, and academically.



The College of Science Technology Engineering and Mathematics hosted their 4th annual symposium on March 26th and 27th 2025. The theme for 2025 was "AI Driven Quantum Leap in Science and Technology". The event hosted over 850 students, industry partners, faculty/ staff, and community members across the two-day event. This annual event is used to generate scholarships for our students, college of STEM workers hard to supply the workforce with talented, passionate, and educated STEM professionals. Thank you to our 2025 symposium sponsors and attendees!

## High School STEM Exploration Day

March 27th the college hosted a "High School STEM exploration day" Where over 300 students from 8 different high schools from surrounding counties, came to campus to explore career opportunities.



Events like the high school exploration day help the college to expand opportunities in the community.



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## 2024-2030 CSTEM Strategic Plan

### Vision

The vision of the College of STEM is to empower students to become leaders and innovators in STEM fields, fostering a learning environment that embraces and encourages creativity, and promotes real-world problem-solving. We strive to shape future professionals who will advance scientific and technological progress, addressing global challenges and making a positive impact on society.

### Mission

The mission of the College of STEM is to provide a strong foundation in the core areas of science, technology, and mathematics while actively recruiting, retaining, preparing, and graduating students to succeed in an interdependent global workforce.

### Values

1. Excellence – Striving for the highest quality in education, research, and professional development.
2. Innovation – Encouraging creativity and forward-thinking to solve complex challenges.
3. Inclusive Environment – Promoting a supportive environment for all students, staff, and faculty.
4. Collaboration – Fostering teamwork and partnerships within and across disciplines.
5. Integrity – Upholding ethical standards and responsibility in all academic and professional pursuits.
6. Curiosity – Cultivating a passion for learning, exploration, and discovery.
7. Global Responsibility – Preparing students to address the needs of an interconnected and evolving world.

### Strategic Priorities & Initiatives

1. Establishing Specialized Academic and Career Pathways in STEM
2. Enhancing STEM Student Success and Promoting Social Mobility
3. Expanding Enrollment in STEM Programs
4. Strengthening Partnerships with the STEM Community and Industry

## Coding Boot Camp June 2- 12, 2025-



In collaboration with Clayton County, the College of STEM successfully hosted a dynamic Summer Coding boot camp. This immersive program introduced students to the fundamentals of computer science through hands-on experience with the Python programming language. Participants explored key concepts such as problem-solving and algorithm development, software design principles, testing and debugging techniques, and the use of data types and data representation. The camp provided an engaging environment for students to build foundational coding skills and spark their interest in STEM careers.

## CSU Faculty AI Workshop June 16-18, 2025-

In support of Google, the College of STEM recently hosted a faculty AI workshop focused on foundational concepts in artificial intelligence. The session explored practical strategies and key insights for integrating AI into academic settings. This professional development opportunity was proudly supported by the Launchpad Leadership Academy.



## Summer Camps & Community Development



### NASA (AISEE) Camp June 1-8, 2025-

The Artificial Intelligence Study in Earth Exploration (AISEE ) Summer Academy is a five-year initiative (2023–2028) funded by NASA and hosted annually by the College of STEM. This immersive, eight-day residential program is designed to inspire and empower minority high school students through hands-on experiences in STEM. Each summer, participants are introduced to college life while engaging in cutting-edge

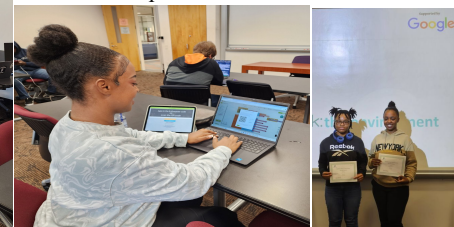
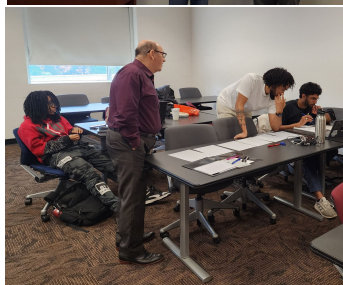
NASA-themed activities. The program focuses on the intersection of Earth science, NASA Earth data, and Artificial Intelligence (AI), offering students a unique opportunity to explore real-world applications of emerging technologies in Earth exploration.



## AI & APP Development Summer Camp for CSU Students June 9-14, 2025-



With the support of Google, the AI & App Development Summer Camp offered an exciting opportunity for CSU students to gain hands-on experience in technology. The program included certificate training in basic programming skills, app development, and artificial intelligence systems and applications. Campers also participated in a dynamic hackathon, putting their new skills to the test in a fun and competitive environment.



## Science Summer Camp June 23-26, 2025-

The College of STEM recently welcomed 10th–12th grade students to its annual Science Camp at Clayton State University

Campers participated in exciting hands-on lab experiments and engineering challenges across chemistry, biology, physics, and environmental science. In addition to the immersive academic experience, students had the opportunity to connect with STEM faculty, current college students, and alumni. These interactions provided valuable insights into college readiness, academic pathways, and life at Clayton State. The camp also included guided tours of the campus, giving students a glimpse into their potential future as college scholars.

