NEWSLETTER SPRING 2023 - VOLUME 2

CLAYTON STATE UNIVERSITY - COLLEGE OF INFORMATION AND MATHEMATICAL SCIENCES

GIVE4DREAMS 2023

Every Spring Semester, Clayton State University has its annual fundraising campaign, #Give4Dreams. This year, CIMS met their fundraising goal by 130%! CIMS had 39 donors and received \$12,686 for the College.



New Program Alert!

Graduate Program: the Master of Science in Data Science (MSDS) has been approved and will be launched for Fall 2023.

Undergraduate Programs: CS/IT has added two new engineering concentrations in computer science (CE) and information technology (ITE) starting Fall 2023.

CSIT and Mathematics have partnered to offer a 4+1 Program to help Undergraduate students also earn a Master in Data Science and Cyber Technology.

Grants

CSIT faculty have been busy submitting proposals for private grant funding. 9 projects have been funded with the total amount of \$698,000. Here is some of their hard work;

- "Artificial Intelligence Student in Earth Exploration Summer Academy," funded by NADA. 2023-2028, \$425,000. Pl Dr. Shuju Bai CoPI Dr. Jungeng Ou
- "Autonomous Robots Collaborate Best Under Uncertainty and Communication Limitations," funded by NASA \$2,500 2022-2023 PI, Dr. Ylangdons Ap.
- "TIPS-ISL: Teach-back Integrated with Problem Solving for Improved Student Learning," funded by CSU Retirees Association \$1,500 2022-2023 PI, Dr. Muhammad Rahman
- "Clayton State University GenCyber Gamification Accelerator Program," funded by GenCyber Program, NSA/NSF, 2022-2024 \$10,000 PI Dr. Shuju Bai. CoPI Dr. Junfeng Qu, Dr. Byron Jeff, and Dr. Batavia Sumlin.
- "Clayton State University GenCyber Gamification Accelerator Program," funded by GenCyber Program, NSA/NSF, 2022-2024 \$100,000 PI Dr. Shuju Bai. CoPI Dr. Junfeng Qu, Dr. Byron Jeff, and Dr. Batavia Sumlin.

Mathematics Faculty have been also working hard applying for grant funds. Mathematics currently have 5 proposal submissions waiting a funding decision. Faculty have received the following funding so far this year:

- "The Chelby Slappy Clayton State Cubing Society" funded by MAA Tensor-SUMMA 2021-2023. Pl Dr. David Plaxco
- "Tensor Woman Program" funded MAA 2023 \$6,000. Pls Dr. Catherine Matos, Dr. Louisa Catalano, and Dr. Briana Vick

Faculty work hard writing proposals for grant funding to help bring additional opportunities to our students.

Thank You! For all your hard work!

CIMS Student Spotlight

Kersten Toebben- A recent graduate from the Master in Archival Studies program, Kersten was a member of the Honor Society and was student chair for CSU's branch of Phi Alpha Theta. Kersten is current working full-time at the Georgia Archives and plans to sit for the Academy of Certified Archivists exam this summer.

Elijah Holloway- Elijah started his time at Clayton State and a duel-enrollment student attending Clayton State instead of attending high school. His senior capstone project he worked with Dr. Krop on a famous research problem (The Second Neighborhood Conjecture) He also has a publication in physics, having worked with Dr. Beznosko.

Jonathan Clement- A CIMS student assistant, Jonathan has been working on IOT project which led to a poster presentation at CIMS symposium, the title of the poster is Building a Security Camera Monitoring System Using Raspberry Pi and Node Red.

Brenda Jimenez- is graduating with Bachelor of Information Technology in Spring 2023. She significantly contributed to the 2023 NASA Minds project. This project placed third at the NASA Minds competition. Brenda has always demonstrated ambition and maturity. She shows genuine interest in developing her skills, challenging her abilities, and being a great role model for her peers

William Carroll- President of CSU's ACM chapter, supervised by Dr. Muhammad Rahman. He led ACM to win a grant from Clayton State Retirees Association and successfully presented the project to ACM's conference.

Austin Daigle- has been working under Dr. Nguyen's supervision on developing an optimized general purpose textural similarity algorithm.

CIMS Faculty Spotlight



Dr. Louisa Catalano: Dr. Catalano started at CSU in 2022 and has already applied for and received a grant from the Mathematical Association of America (together with Drs. Matos and Vick) for the "Clayton State University's Laker STEM Sisters" program. Dr. Catalano is also spending the summer doing research, first in Seville, Spain, and then for a special invitation to the Institute for Advanced Studies at Princeton. She has several publications in key journals in her field—abstract algebra—and has several manuscripts that are either in submission or will be by the end of the summer. Dr. Catalano is also a co-PI on the MUSEIP grant to improve retention for stem students through a focus on undergraduate research activities.

Ms. Penny Cliff: Ms. Penny Cliff joins Clayton State from the Georgia Archives. Ms. Cliff is the new program director of archival and information studies. The Georgia Archives and NARA at Atlanta were built close to Clayton State University so that Clayton State University students and faculty would have close access for research. We continue to foster present and future collaborations with both the Georgia Archives and NARA at Atlanta. Our proximity to both archives is distinctive in the nation and we work to take full advantage of what both archives offer for our students.





Dr. Junfeng Qu

Dr. Shuju Bai and Dr. Junfeng Qu have successfully won grants from NSA/NSF and NASA with the total amount of \$675,000. The two grants from NSA are to teach teenagers to GenCyber cyber security concepts, expose them to cyber security careers, and promote cyber security awareness and student interest. The project founded by NASA focuses on engaging minority high school students in knowledge and skills of Al and how to apply it to earth science to solve real-world problems, provide college residential experience for program participants, provide learning experiences in college educational setting for program participants, and connect them to STEM professionals in earth science.



Dr. Shuju Bai

New CIMS Faculty and Staff

This year, the College of Information and Mathematical Sciences welcomed 2 new faculty members! Archival Studies welcomed a new director, Ms. Penny Cliff who joins us from the Georgia Archives. Archival studies also introduced a new assistant professor, Ms. Jessamyn Swan.

Computer Science and Information Technology also introduced a new Administrative Assistant, Ms. Esther Fontin.



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CIMS Student Awards

Every spring semester, our College holds a student award ceremony to congratulate our students and recognize their achievements. This spring, on May 16, 2023 we held our 18th annual student award ceremony. We awarded 8 prestigious awards to our outstanding scholars.

Associate of Applied Science in IT Scholar: Princess Carter

Bachelor of Information Technology Scholar: Brenda Jimenez

Computer Science Outstanding Scholar: Robert Powell

Annita Hunt Award: Minh Hieu Nguyen

Billy R. Nail Mathematics Award: Akil Quadir

Billy R. Nail Mathematics Scholarship: Hannah Rigdon

Rising Senior Award: Devin Waller

Catherine Cowan Aust Award: Austin Tran



CIMS Industry Partners

Mailchimp/Intuit

TDK

Google

ADP Clayton County ITS Colonial Pipeline

Costco Business Center

Georgia Power

Cox Enterprises

Intel

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

In 2023, we welcomed Colonial Pipeline, Georgia Power and Costco to our industry ecosystem

2022-2023 CIMS Advisory Council

Ken T. Takekawa- President/CEO of TDK Components USA.

Christine Sarabia-Founder/CEO of Celesios

David Byrd- Google Site Lead, Technological Solutions Engineer, Google Cloud

Jonathan Kyle- Director, Vertical Solutions - Intel Smart Edge

Vicki Bodman- Vice President of Engineering and Senior Director of Engineering at Mailchimp

Lain Shakespeare-Senior Director of Corporate Citizenship at Mailchimp

Brandon Perry- Talent Acquisition at ADP

CIMS Ranking

CSU's Most Popular Undergraduate Majors

1. Health Sciences

2. Computer Science

3. Biology

CSU's Most Popular Graduate Programs

Cyber Technology

4. Data Science

SPRING 2023

2023 Symposium

The College of Information and Mathematical Sciences hosted their second annual Symposium on March 15 and 16, 2023. The theme for 2023 was "Advancing Knowledge through Innovation and Technology." The event hosted over 450 students, industry partners, faculty/staff, and community members across the two day event. This annual event is use to generate scholarships for our students. CIMS works hard to supply the workforce with talented, passionate, and educated STEM professionals.

Thank you to our 2023 Symposium sponsors and attendees!











CIMS Lab Update!

We have several interesting projects both in development, and in progress. We are in the preliminary stage of an autonomous urban farming project. It will use an aerial drone to monitor and control a land-based farming drone. In addition, we are starting a project to make a prototype EV that will drive, pick up/drop off passengers, and avoid obstacles all without human direction. Coming soon we will follow up last years robot which was designed, engineered, and produced completely on our campus.





High School STEM Day

March 16, 2023 CIMS hosted a "High School STEM Exploration Day" where over 150 students from 5 different high schools came to campus to explore CIMS.

Mundy's Mill HS, Forrest Park HS, Jonesboro HS, Morrow HS, and Dutchtown HS were all in attendance.





Events like the CIMS High School Exploration Day help Clayton State University expand educational opportunities throughout Metro-Atlanta.