

NEWS FROM THE COMPUTING & MATHEMATICS DEPARTMENT

CM Department MOVED!





An incredible \$1.45 million grant from the **A.R. and Marylouise Tandy Foundation**, awarded to the Computing & Mathematics Department in 2024, has transformed the former Biology/Chemistry spaces on GC 1 over the past year, creating a state-of-the-art environment for innovation and learning:

- The former KME room has been transformed into a state-of-the-art Drone Control Room, located next to the old ACM room, which is now a spacious Drone Arena.
- Former lab spaces have been repurposed into the new Edge Computing and Network Administration Labs.
- One old biology lab was completely gutted and rebuilt as the Game Design and Development Lab, now equipped with six team development stations.
- The Al Lab, along with our robotic dog, has found a home in another newly renovated space.
- The department offices have finally moved out of their former "cave" on GC
 1.5 and into modernized spaces designed to foster student collaboration and support.

 Exciting plans are underway for a summer coding academy tailored for both students and instructors.

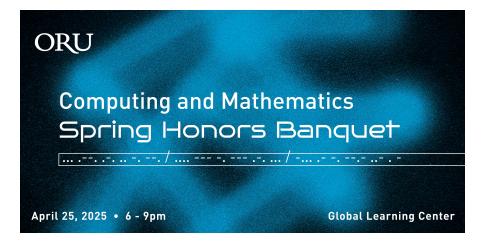


Dr. Kenneth Weed (Dean, College of Science and Engineering), Dr. Andrew Lang (CM Department Chair), Dr. William Wilson (ORU President), Dr. Kathaleen Reid-Martinez (ORU Provost), Chloe Winkler (CSC major and ACM-W President), and Carrington Boswell (CIT major)

A special Ribbon-Cutting Ceremony took place on November 8 in the new Gaming Lab.

Our department continues to grow, reaching a total of 157 majors this spring. Computer Science remains our largest program, with 58 students pursuing the major.

Spring 2025 Honors Banquet



Get ready for an evening of celebration at the CM Department's Spring Honors Banquet on April 25, 2025! This enjoyable event is where we'll shine

the spotlight on our remarkable students, applauding their achievements over the past year. Interested in playing a part in this memorable night? Consider purchasing a table for the upcoming banquet.

CLICK HERE

To join in on the fun and contribute, please click the link in the box above. Don't miss this chance to be part of an event filled with honor, inspiration, and ORU spirit!

2024 Food Bank Volunteer Day



The CM Department returned to the Food Bank of Eastern Oklahoma for the third year in a row on September 21st. Students, faculty, and CM Advisory Board members finished a busy morning with 1,860 pounds of food packed into 960 bags for kids!

CM Fall Picnic

The department enjoyed a relaxing afternoon at The Farm this fall. Hiking, card games, campfires, and s'mores kept everyone happy!



Sam Vargas, Favour Okpah, Chloe Winkler, Monti McKeen, Queena Lee Chin, Dr. Stephen Wheat, Scott Alons, Keturah Steele, Bella Goodman, Alexa Hunt

2024-25 Graduate Fellow Quest Scholarship

Stebin Thomas Jose was awarded the 2024-25 Graduate Fellow Quest Scholarship in the College of Science and Engineering. The scholarship includes an annual stipend plus full tuition for the year. Stebin was born and raised in Kerala, India. He is currently pursuing a master's degree in Computer Science, and has a strong interest in the intersection of robotics and machine learning. Stebin's responsibilities include teaching CSC 111 – Intro to Computing and organizing all of the department's technology resources. As part of his research, he is working on an autonomous drone that can navigate efficiently by finding the fastest path and avoiding obstacles using reinforcement learning in different environments.

Association for Computing Machinery (ACM) Club & ACM-W for Women

The ORU ACM Chapter is a community of students who are dedicated to learning computing skills and helping each other grow, as well as using their expertise to make the world a better place.

The 2025 spring semester club officers are:

President: C. Scott Alons
Vice President: Ian Zam
Secretary: David Iyelolu
Treasurer: Alvin Guri

We also have the Association for Computing Machinery Women (ACM-W). The central goal of this student chapter is to provide a platform for women in computing to connect, network, and support each other.

The 2025 spring semester club officers are:

Chair: Chloe Winkler

Vice Chair: Rebecca Randall

Secretary/Treasurer: Bella Goodman

Publicist: Esther Muang

PROGRAM NEWS

NSF Midwest Noyce Conference

Professor LeighAnne Locke, Austin Sweet, and Jeremy Luczak presented "Ideas for Curriculum Enhancement and Skill Building in Math Education Including Standards-Based Instruction and Assessment" at the NSF Midwest Noyce conference on October 19, 2024 in St. Louis, MO. The focus of the presentation was to share a variety of ideas relevant to current best practices and the increased focus on standards-based instruction and assessment for the mathematics classroom. The presentation was a collaborative effort between Professor Locke, who was the Co-PI of the ORU NSF Noyce grant project and two mathematics graduates that participated in the Noyce program at ORU. Jeremy Luczak is currently a middle school teacher in the Broken Arrow Public School District and Austin Sweet is the District Learning Specialist for Broken Arrow Public Schools.





Luczak, Locke, and Sweet

2024-25 STANLEY WHITE SCHOLARSHIP RESEARCH



Rita Njoroge is a senior Computer Science major from Nairobi, Kenya. Her proposed research area with **Dr**. **Stephen Wheat** is genetic analytics on High-Performance Computing (HPC) infrastructure such as ORU's Titan supercomputer. It involves identifying regions of significant difference between two different genetic sequences. It is related to the efficacy of human cancer research on various animals to develop drugs to arrest, cure, and/or prevent cancer in humans. After eventually pursuing a master's in Computer Science with a concentration in Artificial Intelligence, Rita intends to start her own tech company to help support a new generation of innovation and imagination extensively from Africa.



Bella Goodman is a senior pursuing dual degrees in Computer Science and Mathematics. She came to ORU from Midland, TX. Her research with Dr.

Jayne Ann Harder will focus on math education research, specifically on COVID-19 learning losses, high school math curriculums, and math anxiety, and the impact on mathematics readiness for college math courses. After graduating from ORU she plans to "move to Argentina, get my Ph.D., teach CSC classes (probably at ORU), and buy some cute little dogs."



C. Scott Alons is a senior from Timnath, CO who is also completing dual degrees. His degrees will be in Mathematics and Biblical Literature, with a New Testament concentration for Biblical Literature. Scott has released a preprint of his paper, "The Pitch-Class Integer Theorem," and will be pursuing publication in a peer-reviewed journal. His continuing research seeks a novel axiomatization of musical harmony, investigating the relationship between harmony and algebraic topology. Dr. Andrew Lang is his faculty sponsor.



Queena Lee Chin is a senior Computer Science major from Penang, Malaysia. She will work with **Dr. Stephen Wheat** and her project will be to develop a distributed graph generator to generate planar graphs of arbitrary size and density. Queena plans to return to Malaysia after graduation to pursue a career in Computer Science.

Another National Science Foundation (NSF) \$16K REU Award

Congratulations to **Dr. Stephen Wheat** for being awarded a third supplementary NSF-funded REU award. The award of \$16,000 provides additional funds for undergraduate research. It brings the total award for the project to \$447,382. Our department is unique because of the way it supports undergraduate research using Titan, our supercomputer. There are now six undergraduate students conducting research: **Evonn Annor, Elena Davis, Nate Jacob, Hayk Shahumyan, Lara Silverthorn,** and **Chloe Winkler.** Their research focus is the homology of human versus bonobo regarding efficacy of current oncology research.

Kappa Mu Epsilon (KME) Chapter

Kappa Mu Epsilon (KME) is a specialized honor society in Mathematics. Founded in 1931, KME promotes the study of mathematics among undergraduate students. The society's members are selected from students of mathematics and other closely related fields who have demonstrated academic excellence and professional merit.

The 2025 spring semester club officers are:

President: C. Scott Alons

• Vice President: Prem Thannickal

Secretary: Victor Gomes

• Treasurer: Nathan Anderson

Looking for Master's Candidates

Our new Master of Science in Computer Science degree program offers two concentrations: Data Science (including courses in Data Mining and Machine Learning, and Artificial Intelligence) and Computer Science (including courses in Advanced Algorithms and Automata and Complexity Theory). This 30.5-credit-hour program can be completed in 12-24 months, with a fast-track option available. Graduates of this program may pursue careers in High-Performance Computing, Database Administration, Dev/Ops Engineering, or Application Programming. We are excited to offer this program to students and to support their professional growth.



COMPUTER SCIENCE CONCENTRATION

DATA SCIENCE CONCENTRATION

Where are they now?

Queena Lee Chin, BS Class of 2025 – Graduate Talent (CPU Validation), Intel, Malaysia

Derrick Baruga, BS Class of 2025 – Development Analyst at Safety Radar, Tulsa, OK

Anna Price, BS Class of 2024 – Environmental Scientist I, State of Delaware, Division of Public Health, Office of Radiation Control

Faculty in the News

<u>Dr. Andrew Lang featured in CCCU Advance magazine, sharing insights on Al and its impact on education</u> - **November 2024.** Read all about how Al is transforming education and shaping the future.

Faculty Congratulations

Dr. Wheat's Sabbatical: Dr. Wheat has been granted a sabbatical for the Fall 2025 semester.

Dr. Harder's Sabbatical: Dr. Harder has been granted a sabbatical for the Spring 2026 semester.

CM Seminar Guest Speakers

The Computing and Math Seminar was happy to host several speakers during the 2024 fall term:

Charles Howell

Charles is a 1976 ORU graduate with a B.S. in Business Administration. He enjoyed a career in Information Technology, working across the country, including on the West Coast. He retired in 2017 as IT Director at Floyd Medical Center in Rome, GA, and is now building a second career with the software startup OpsTempo.

Dr. James Elumogo

Dr. Elumogo is a cybersecurity expert and a proud alumnus of our department. He is an Enterprise Solutions Architect at General Dynamics and is also teaching as an adjunct this semester.

Dr. Phil Anderson

Dr. Anderson is a mathematics education expert and former Associate Dean at Pikes Peak Community College. He is also teaching as an adjunct this semester.

The department is always looking for volunteers to be guest speakers for classes and seminars. Contact **Dr. Lang** at alang@oru.edu if you are interested.

CM Advisory Council

The CMAC (Computing & Mathematics Advisory Council) supports the Computing & Mathematics Department in achieving its goals and objectives in community engagement, fundraising, excellence in program curriculum, and overall promotion of the department. The Advisory Council has created the "CMAC Fund" to allow the council to invest in and support CM students and faculty. If you would like to make a contribution, please contact **Dr. Andrew Lang**Dr. Andrew Lang at alang@oru.edu. We are grateful for the support of the CMAC and for the impact that their contributions have on our department.

New CMAC members who will join us in 2025 include:

- Chris Busch, Founder and CEO of LightQuest Media, Inc. and DigiQuest LLC
- Linda Grosso, Director of the Project Management Office (PMO) at SEQTEK
- Brad Thomas, Retired CEO of International Chemical Company and retired President of Ozark Steel

All of the CMAC members bring unique and personal skill sets to the board, and will help the department to continue its growth!



Front Row (L to R) – Becca Wilson, Kim Sellers, Suzanne Behr (CMAC Chair), Sasha Turtova, Dr. Jayne Ann Harder, and LeighAnne Locke. Back Row (L to R) – Brent Coussens, Brien Brown, Salmon Riaz, Brent Lewis, Scott Carr, Andrew Morris, Trey Bomier, Dr. Jan Woerner, Dr. Stephen Wheat, Dane Boswell, Dr. Andrew Lang (Department Chair), Dr. Enrique Valderrama, and Grant Wachendorf

New Beginnings after Spring Semester 2025

Several of our faculty and staff will be leaving the department after spring semester to embark on new phases of their lives:

- **Dr. William Collier**, Senior Professor of Chemistry, plans to retire.
- Monti McKeen, Administrative Assistant, will be moving to Ohio to be near family.
- Professor Chad Walker is being called to ministry.
- Professor Shirajini Threadgill also plans to retire.

We wish them all the very best in their new adventures!

DEPARTMENT OPPORTUNITIES

Adjuncts Needed

Our Computer Information Technology and Computer Science programs are growing rapidly, and we are seeking to hire adjunct Computing professors to teach several courses on the ORU campus. These positions are for the 2025-26 school year and interested parties should apply as soon as possible. There is a possibility that these positions could turn into full-time positions.

Candidates must hold, at minimum, a master's degree in Computer Science or a related discipline. If you are interested, please send your résumé to **Dr.**Andrew Lang at alang@oru.edu.

Other Opportunities and Needs

We are grateful for the support of our donors, who enable us to continue growing and developing whole leaders for the whole world. If you'd like to make a difference in the next generation of Computing & Mathematics students, please consider making a donation to support the various labs and scholarships that need your help.

MAKE A GIFT

(For "Find a Designation" select "Computing and Mathematics Department." Then type "Math/Science Discretionary Fund 203137, Org 51221" in the Comments box.)

You can also mail a check. On the memo line, write "Math/Science Discretionary Fund 203137, Org 51221." Mail to: Oral Roberts University, Office of Development, 7777 South Lewis Ave., Tulsa, OK 74171

To give to our department endowment, a specific scholarship fund, or for some other specific purpose, contact Dr. Lang (alang@oru.edu) for instructions.

New CM Social Media Accounts!

CM now has social media accounts to share important department information and events. You're going to be surprised by some of our news! The account handle for Instagram is @orucompandmath and for X (formerly Twitter) it is @ORUCOMPMATH. Be sure to follow us there and on LinkedIn! You can access all of our accounts with the following QR code:



PLEASE STAY IN TOUCH!

We'd love to hear how you're doing in life and in your career. Tell us your stories! Call 918-495-6705 or e-mail cscmath@oru.edu.

If you're around town, let us know and we'll take you to lunch in SAGA and give you a tour of Titan, our supercomputer and our GPU cluster, Eli!

UPDATE MY CONTACT INFO

ETC.

Please fill out this form if you'd prefer to receive a paper receipt when you make a gift to ORU rather than a receipt via e-mail.





If you wish to be removed from this group's mailing list, you can <u>unsubscribe</u>.