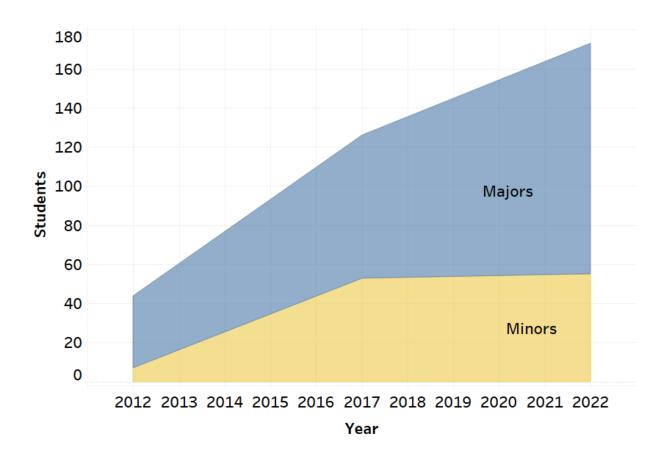


NEWS FROM THE COMPUTING & MATHEMATICS DEPARTMENT



Dr. Jayne Ann Harder, Associate Professor of Mathematics, talks with students in the Stanley White i4 Digital Enterprise Lab.

CM DEPARTMENT GROWTH CONTINUES!



By the numbers:

- Our number of department majors has grown over 200% in the last ten years.
- Our number of department majors has grown 67% in the last five years.
- As of Spring 2022, we have 118 majors.
- We expect record growth in Fall 2022 based on early enrollment estimates.
- We now offer 8 undergraduate degrees and one master program!

Future department plans include new degree concentrations in Mathematical Linguistics, Bioinformatics, and Cheminformatics; new programs involving game development and cybersecurity; creating a Networking Lab and an Edge Computing Lab; and a Drone Arena!

OTHER OPPORTUNITIES AND NEEDS

We are so grateful for everyone who supports our department. It's our donors' generosity that enables us to keep growing and developing whole leaders for the whole world!

There are various labs and scholarships you could contribute toward. If you want to give and make a difference in the next generation of Computing and Mathematics students, click on the button below. (Under Designations, click on "Other," then scroll down and type ""Math/Science Discretionary Fund 203137, Org 51221" in the Additional Comments box at the bottom of the page.)

MAKE A GIFT

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

Our greatest classroom needs at this point are funding to create the Network Administration Lab (\$70K) and the Edge Computing Lab (\$70K). Both of these labs are associated with naming rights. Please contact Dr. Lang at alang@oru.edu if you or your company or a charitable foundation are interested in these types of sizable opportunities.

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

STUDENTS EXCEL ON THE MOST DIFFICULT UNIVERSITY-LEVEL MATH EXAM

Congratulations to Caleb Alons, Aidan Wright, Andrew Chapuis, Payton Blankenship, and Andrew Westlund for outstanding scores on the 82nd William Lowell Putnam Exam! The Putnam Exam is considered to be the most prestigious and most difficult university-level mathematics competition in the world, and its difficulty is such that the median score is often zero (out of 120) despite being attempted by students specializing in mathematics.



Caleb Alons Math Major



Aidan Wright
Data Science Minor,
Engineering Major



Andrew Chapuis Math Minor, Engineering Major



Payton Blankenship Math Minor, CSC Major



Andrew Westland Math Minor, CSC Major

DR. WHEAT AWARDED \$399,382 NSF GRANT

The National Science Foundation (NSF) has awarded Dr. Stephen Wheat, Professor of Computer Science, a \$399,382 Advanced Cyber-Infrastructure Grant. The grant will allow for the deployment of a GPU-based server partition called Eli, and integrate it with Titan, ORU's 7,000+ core supercomputer. Eli will address the GPU and storage needs of computing for research, research training, and education for colleges and universities throughout Oklahoma. The Titan supercomputer is being used by 19 other universities around the country.

MORE INFORMATION ON THE ADVANCED CYBER-INFRASTRUCTURE GRANT



ADJUNCTS NEEDED

Our Computer Information Technology and Computer Science programs are expanding rapidly and the department needs to hire Adjunct Professors to teach several courses. We're also thinking of starting a concentration in Game Development, so experience in this area is a plus. These positions are for the next school year, which means interested parties should begin the application process as soon as possible. There is also a possibility that these positions could turn into full-time positions. Candidates need to hold, at a minimum, a master's degree in Computer Science or a related discipline. If you are interested, send your resume to Dr. Andrew Lang at alang@oru.edu.

LOOKING FOR MASTER'S CANDIDATES FOR FALL 2022

Our new Master of Science in Computer Science degree program offers two concentrations: Data Science (including courses in Data Mining & Machine Learning and Artificial Intelligence) and Computer Science (including courses in Advanced Algorithms and Automata & Complexity Theory). It is a 30.5-credit-hour program that can be completed in 12-24 months, with a fast-track option. Career opportunities are possible in High-Performance Computing, Database Administration, Dev/Ops Engineering, or Application Programming.

MS COMPUTER SCIENCE
COMPUTER SCIENCE CONCENTRATION
LEARN MORE

MS COMPUTER SCIENCE DATA SCIENCE CONCENTRATION $\underline{\mathsf{LEARN}\ \mathsf{MORE}}$

2022-2023 STANLEY WHITE SCHOLARS

The department will have four Stanley White Scholars in the upcoming school year. Scholars receive a \$3,000 scholarship. They also work with a specific professor and complete a major research project. Our Scholars are:



Hamed Mozafari working with Dr. Collier



Jingee Mok working with Dr. Valderrama



Shaofan Li working with Dr. Harder



Rita Njoroge working with Dr. Wheat

CM HONORS BANQUET INCLUDES SOME OF ORU'S AND THE COLLEGE OF SCIENCE AND ENGINEERING'S HIGHEST AWARDS



Left to right: Chad Brandt, Gladys Chen, Morgan Frye, Dr. Andrew Lang, Jonathan Smith, Jared Dean, and Corne Beneke.

On April 11, the CM Department held its Honors Banquet to recognize the outstanding achievements of students and faculty.

Student Awards:

- Gladys Chen, Outstanding Mathematics Student, Overall Outstanding CM Student, and Overall College of Science and Engineering Student (and eventual ORU QUEST Scholarship recipient for 2022-2023)
- Chad Brandt, Outstanding Applied Science Student
- Jared Dean, Outstanding Computer Information Technology Student
- Jonathan Smith, Outstanding Computer Science Student and Outstanding Computer Science Senior Project
- Morgan Frye, Outstanding Mathematics Education Student
- Corne Beneke, Outstanding Mathematics Preactuary Student
- James Cooper, Outstanding Computer Information Technology Senior Project
- Gladys Chen and Esther Lun, Outstanding Mathematics Senior Project

WATCH GLADYS' SPEECH AT HONORS CHAPEL

Faculty Awards:

- Andrew Lang, Ph.D. and Enrique Valderrama, Ph.D. CM Scholars of the Year, College of Science and Engineering Scholars of the Year, and ORU 2022 Models of Excellence in Scholarship Award Collaborative Scholarship Category (joint award as part of ORU's Healthy Community Research Group)
 - J. Bryan Osborne, D.C.S. Excellence in Teaching Award
 - Leighanne Locke, M.S. Outstanding Service Award

Also, CM Advisory Council member Kenny Mullican was chosen as the CM Department's Outstanding Alumnus of the Year.



Gladys Chen, Mathematics Major

2022 CM HOODING AND COMMENCEMENT

The CM Hooding Ceremony took place on April 29 in the Skyline Room of CityPlex Towers. Commencement was the following day, April 30.

The CM Department was proud to graduate 36 seniors!

Applied Science Majors

Chad S. Brandt, magna cum laude Arayna J. Sullivan
Maxwell Knibbe Glory Thomas
Darika S. O'Brien Jonathan D. Wrona
Brandy J. Redwine

Computer Information Technology Majors

Sydni J. Brown, summa cum laude Tafadzwa
M. Chimbindi, summa cum laude
David Nwanze
James L. Cooper, magna cum laude
Jared B. Dean, summa cum laude
Christopher S. Farell
Caleb Hulsey
Chenille Jacob
David Nwanze
Sean P. O'Brien
Aaron Stirewalt, summa cum laude
Joy Umeh
Virgil J. Vasiu, cum laude

Computer Science Majors

Oluwadamilare Akinremi Zechariah Tay, summa cum laude Carter D. McCullough Chungman Won Jonathan J. Smith, magna cum laude Chilufya Mwewa Mutale

Information Technology Majors

De'Andre J. Cameron Jonah Sanders

Mathematics Majors

Gladys Chen Ying Xuan, summa cum laude Zachary W. Mast
Siam S. Lun, magna cum laude Lidya G. Solomon, magna cum laude

Mathematics Education Majors

Sean Bush, summa cum laude Morgan L. Frye, cum laude

Mathematics Preactuary Majors

Corne Beneke, summa cum laude Eberechukwu A. Mbam, magna cum Cin S. Mang laude

ABET ACCREDITATION

The CM Department is pursuing its first-ever ABET accreditation for our Computer Science and Computer Information Technology programs.

According to www.abet.org:

"ABET accreditation provides assurance that a college or university program meets the quality standards of the profession for which that program prepares graduates. We accredit programs, not institutions...It adds value to a program.... Graduates from an ABET-accredited program have a solid educational foundation and are capable of leading the way in innovation, emerging technologies, and in anticipating the welfare and safety needs of the public."

The goal is to be accredited by Fall 2024.

CM SEMINAR GUEST SPEAKERS





Kenny Mullican

Dane Boswell

The Computing and Math Seminar was happy to host several speakers during the spring term 2022:

- January 19 Christopher Taylor, Database Manager, Google
- February 8 Kenny Mullican, CIO, Paragon Films
- March 30 Dane Boswell, Senior Global Process Consultant, Hilti, Inc.

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 (CMAC)



Advisory Council, March 8, 2022 meeting. Front row, left to right - Dane Boswell, Jayne Ann Harder, Kim Sellers, Sasha Turtova, Andy Tripp, Enrique Valderrama, Suzanne Behr (CMAC Chair) Back row, left to right – Jan Woerner, Stephen Wheat, Andrew Lang (Department Chair), Trey Bomier, Kenny Mullican, Leighanne Locke, Bryan Osborne.

The CMAC 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. We've added two new members this year! Welcome to Trey Bomier (Director of the Institute for Emerging Technologies, Saint Francis Health System) and Kim Sellers (Database Consultant, Sellers Consulting).

Michael Vandusen, CSC Master's student, gave a presentation at the March 8 CMAC meeting, titled "Introduction to the New ORU Graph Analytics Lab – OGAL." He is part of a team that submitted a \$2.5 million NSF proposal that will be awarded, it is hoped, in summer 2022.

The Advisory Council has created the "CMAC Fund" that allows the council to invest in and support the CM students and faculty. If you'd like to make a contribution, contact Dr. Andrew Lang at alang@oru.edu.

OUR PROGRAMS

Undergraduate degree opportunities:

- Applied Science
- Computer Information Technology
- Computer Science
- Pure Mathematics
- Mathematics Preactuary
- Mathematics with a Concentration in Data Science
- Mathematics with a Concentration in PreHealth or Pre-Med

Graduate degree opportunities (fast-track program available):

- Master of Science in Computer Science, Concentration in Computer Science
- Master of Science in Computer Science, Concentration in Data Science

For more information about our programs, faculty, and research activities, see our Computing & Mathematics Department webpage.

PLEASE STAY IN TOUCH!

We'd love to hear of your successes in industry or the business world. 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 our supercomputer Titan (and coming soon: Eli)!