November 2024 ACHIEVEMENTS

KSU College of Computing & Software Engineering

TALENT & TOP SPOTS



Throughout November, our students and faculty sparked brilliant new ideas, impressed audiences with thoughtful presentations, secured top dollar grants, and enjoyed time learning and laughing together.

We kicked off the month with an entertaining, interactive Ideathon. We polished up for Analytics Day, the APEX Awards, C-Day, the Celebration of Teaching Day, PechaKucha and Symposium of Student Scholars and we took home a ton of wins at each event. Then we ended the month in a burst of fun as we slime jumped, speed raced and quick attacked at the Game Expo.

Congrats to all for such a very good month!

THIS MONTH

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NEW GRANTS

Our faculty secured several grants this month. Huge congrats to...



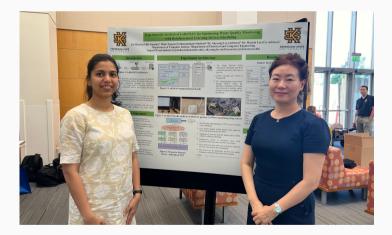
Abhishek Parakh, Mahmut Karakaya, Tu Nguyen & Ramazan Aygun

Advancing High-Speed Networking for STEM Research and Education at KSU National Science Foundation \$634,440



Chen Zhao

Non-invasive Fractional Flow Reserve Evaluation Using Coronary Computed Tomography Angiography <u>2025 American Heart Association Institutional</u> <u>Research Enhancement Award (AIREA)</u> \$194,032



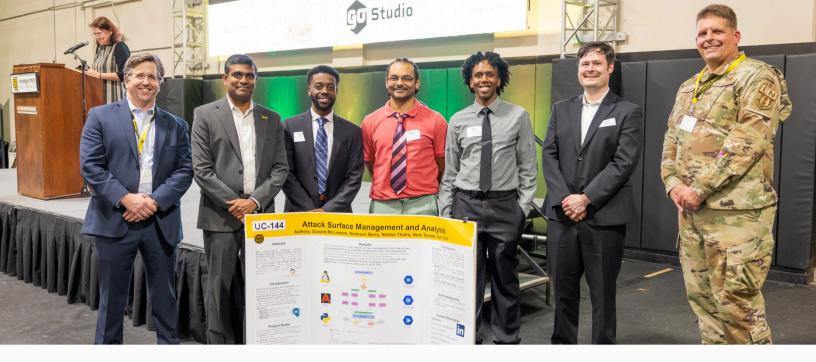
Ahyoung Lee

NSF I-Corps: Translation Potential of Artificial Intelligence-Enabled Bacterial Forecasting System for Water Quality Monitoring National Science Foundation \$50,000



Shirley Tian, Chole Xie, Nazmus Sakib, Ying Xie & Jack Zheng

Affordable Learning Georgia's Affordable Materials Grant \$10,000



C-DAY SUCCESSES

Students brought their best for our <u>Fall Computing Showcase</u>. Congrats to our winning teams:

Undergraduate Capstone

<u>UC 144: Attack Surface Management and Analysis</u> <u>UC 226: Real-Time Bus Monitoring Using Kafka</u> <u>UC 247: Using Dynamic Difficulty Adjustment (DDA) to improve health and wellness apps and programs</u>

Undergraduate Research

<u>UR 147: An 8-bit Digital Computer Design & Implementation (Team COA-WMI)</u> <u>UR 172: A Comparative Study of LLM Effectiveness in Mental Health Assistance</u> <u>UR 213: Generative AI & Cybersecurity</u>

Master's Capstone

<u>GMC 4190: CellNucleiRAG - Smart Search Tool for Cell Nuclei Research</u> <u>GMC 2162: Prompt Engineering and its Effects On AI and Human Relationships: A Contemporary Approach</u> <u>GMC 157: Text-to-Digital Person Video Generator: DigitalAvatarGen</u>

Master's Research

<u>GMR 4234: Evaluating Instance Segmentation Models on Histopathology Datasets</u> <u>GMR 229: Semantic Search using Sentence Transformers</u> <u>GMR 7175: Enhancing Alzheimer's Diagnosis through Spontaneous Speech Recognition: A Deep Learning</u> <u>Approach with Data Augmentation</u>

Ph.D. Research

<u>GPR 185: A Multimodal Approach to Quiz Generation: Leveraging RAG Models for Educational Assessments</u> <u>GPR 1194: Computer Vision-Enhanced Spectroscopy for Glucose Prediction: An In Vitro Validation Study</u> <u>GPR 6126: Utilizing ML techniques for a Quantum Augmented HTTP Protocol</u>

Audience Favorite

UC 131: Karah Khronicles

SDSA SHINES OUT

Students from our School of Data Science & Analytics shone out during <u>Fall Analytics Day</u>. Congrats to all the winners:



Undergraduate Anaya Tention <u>From Campus to Career: Predicting Earnings</u> <u>through Institutional Traits</u>

Nia Taylor Individuality Is Too Much Work! How to Make a Good Unoriginal Movie

Desyne Martinez & Edwin Trejo-Rivera Identifying the Discouraged Workforce: A Dual Model Analysis with Logistic Regression and Random Forest



Master's

Greg Balkcom, Adele Barski, Kristine Duncan & Andy Lewis

Identifying Fraud in Online Surveys: Techniques for Detecting Artificial Intelligence-Generated Responses

Kristine Duncan <u>Profiles of Polarization: Unveiling Key Traits</u> <u>Related to Online Extremism</u>

Greg Balkcom, Adele Barski & Kristine Duncan Gotta Catch the Flight! Longitudinal Analysis of Airport Data

Ph.D.

Faruk Muritala & Caitlin Callahan Maternal Diabetes Condition on Infant: The Role of Birth Weight, Length, and BMI Class by Gestational Age

SYMPOSIUM OF STUDENT SCHOLARS TOP HONORS

Top Presentation: Undergraduate

Anh Duong & John Oakley Promoting Inclusion in Cybersecurity and Empowering the Next Generation: Lessons from KSU's GenCyber Camp

> Research Mentors: Maria Valero & Mia Plachkinova

Top Presentation: Graduate

El Arbi Belfarsi An Algorithmic Approach for Optimizing Blood Transactions in Regions with Scarce Donation Rates

> Research Mentors: Maria Valero, Lin Li & Robert Keyser

CELEBRATION OF TEACHING

More than a dozen of our faculty earned kudos during Celebration of Teaching Day. Our huge appreciation to...

Student Success Champions

Lythia Amoakon Frederic Bien Susan Mathews Hardy Betty Kretlow

Governor's Teaching Fellows Nazmus Sakib

Outstanding Early Career Faculty Maria Valero

Expanding the Nest Recognitions Denise Barclay Susan Hardy Benjamin Watson

PECHA KUCHA WIN



Bobin Deng, Taeyeong Choi and dedicated mentor Paola Spoletini prepared for <u>PechaKucha 2024</u> with every once of dedication and energy in them. Kudos to the team for taking home best demonstration for this labor of love.

Expanding the Nest Recognitions

Lythia Amoakon Marla Bell Nicole Carder Linda Galloway Kevin B. Gittner Ruvini Jayamaha Waqas Majeed Nick Murphy Obioku Obotette Donald Privitera Levanya Sekar Geetika Vyas Chenyu Wang Richard Gesick Gennadiy Kemelmakher Karin Kolb

CCSE AWARDS

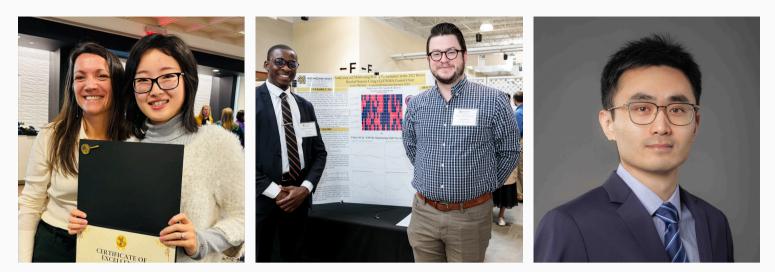


Congrats to our new CCSE Award winners:

Nazmus Sakib Outstanding Early Career Faculty

Nasrin Dehbozorgi Outstanding Research & Creative Activity

APEX AWARDS



Congrats to Xinyue Zhang, Austin Brown & Yan Huang for their outstanding contributions to research, scholarship and creative activities at the university. Very well deserved APEX Awards.

GAME EXPO SPOTLIGHT



Cheers to Chair George Markowsky, Enda Sullivan, Betty Kretlow, Harshitha Nirujogi, Dmitri Nunes Dias Fernandes, Nick Murphy and all our CSE1321 professors for pulling off a fun Game Expo.

And! Kudos to game designers Parker Davison, Sahir Samnani, Rori Liddell & Elias Mohamadi for taking home the win with their take on Black Jack.

SHARE YOUR SUCCESS

We want to hear about your wins. Reach out to Noralil Fores at noralil.fores@kennesaw.edu to share your stories.