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UC San Diego

JACOBS SCHOOL OF ENGINEERING

AROUND CSE

News and highlights from your
Computer Science and Engineering Department
at the University of California San Diego

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CSE NEWS



Working Towards Toxic-Free AI: A New Tool to Prevent Toxic Prompts

With a new benchmark, dubbed ToxicChat, researchers, including Professor **Jingbo Shang**, have proposed a better method to detect and prevent toxic prompts cloaked in benign language in large language models. Unlike prior work, the tool is trained on data from real-world interactions. [Read More](#)



How Do Neural Networks Learn? A Mathematical Formula Explains How They Detect Relevant Patterns

A team led by data and computer scientists at UC San Diego has found a formula used in statistical analysis provides a streamlined mathematical description – the equivalent of an X-ray – into the inner workings of neural networks. [Read More](#)

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Honoring Women in CSE: On International Women's Day

CSE Society UCSD and Triton Quantitative Trading hosted a Women's Industrial Panel and celebrated International Women's Day on March 8. Software and systems engineers from Apple, NVIDIA, AffiniPay, and AoPS were invited to be panelists and share their experiences. The event also spotlighted the achievements and contributions of women in the CSE department and the Jacobs School of Engineering.

NOTEWORTHY



Laurel Riek



Leo Porter



Niema Moshiri



Nadia Heninger

Faculty in the News

Professor **Leo Porter** spoke with in [Tech Lead Journal in episode 165](#) about the essential skill programmers need in the age of large language models: problem decomposition.

Professor **Niema Moshiri** was quoted in a [Nature technology feature](#) on his collaboration with undergraduate **Daniel Ji** to utilize WebAssembly to build browser interfaces for many epidemiological resources.

A [Wired article](#) covered a new paper authored by Professor **Nadia Heninger** and **Keegan Ryan** exploring strategies to improve the efficiency of a celebrated cryptography-breaking algorithm.

Research Spotlight

Professor **Laurel Riek**, director of the UC San Diego Healthcare Robotics Lab, spoke at the Smart Health Frontiers symposium funded by the National Science Foundation regarding her work on “Cognitively Assistive Robots for people with Mild Cognitive Impairment.”

Student Highlights

PhD student **Daniel Beaglehole** has been named a 2023-2024 ARCS Scholar and will be honored by the ARCS San Diego Chapter at the 37th Scientist of the Year Celebration.

CSE EVENTS



Coming to Your CSE Community

AAB Leadership Scholarships (for Undergrads and Masters Students)
[Applications Now Open](#)

CSE End of the Year Celebration
Friday, June 7, 2024



Collaborative Career Fair Creates Opportunities for CSE Students

Two departments in the Jacobs School of Engineering – CSE and Bioengineering – collaborated to host a career fair for students interested in careers at the intersection of these two dynamic disciplines.



Over twenty companies were present at the event, which was held at the Sanford Consortium for Regenerative Medicine on February 14. Students learned about emerging research and technologies in the field and were provided opportunities to talk to employers.

RESEARCH CENTERS & INSTITUTES



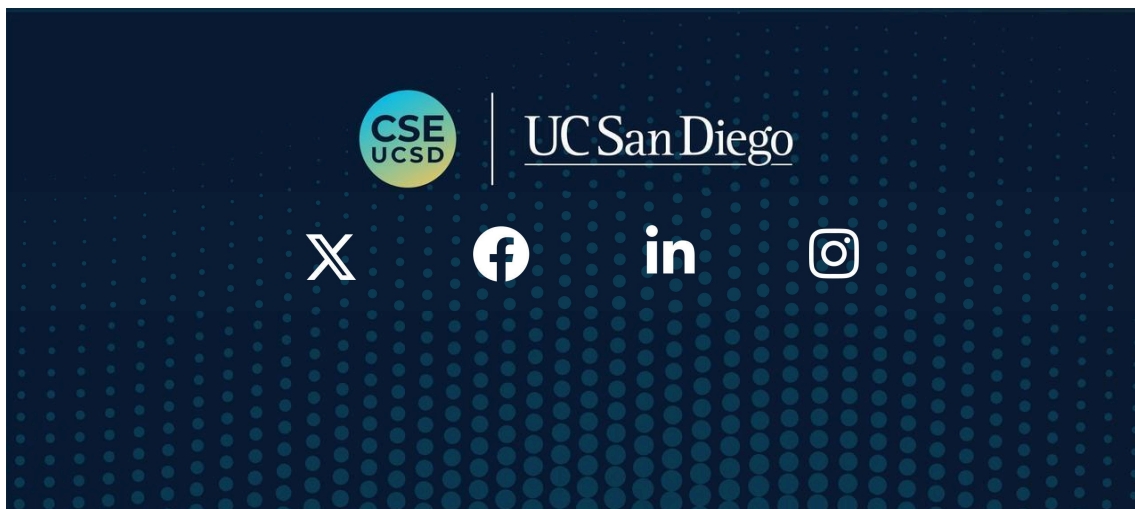
EnCORE Visitors Program Hosts Workshop on Algorithms

The Institute for Emerging CORE Methods in Data Science (EnCORE) welcomed close to 30 experts in algorithms to a research workshop as part of its [EnCORE Visitors Program](#). The three day event, which took place in UC San Diego's Atkinson Hall from March 4 to 6, invited the approximation and computational geometry communities to collaborate to solve challenging open questions related to the theory of clustering.

The EnCORE Visitors Program accepts proposals in all areas of Computer Science, Data

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identify new theoretical directions in an emerging application area, or enable bridging between theory and practice among others.



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