



Stony Brook University



INSTITUTE FOR AI-DRIVEN DISCOVERY AND INNOVATION

Stony Brook University's Institute for AI-Driven Discovery and Innovation in the College of Engineering and Applied Sciences is uniquely positioned to help SUNY and New York state become the epicenter of artificial intelligence research, education and discovery. Advancing research and educational paradigms related to human-machine symbiosis, the AI Institute is grounded in the principle that AI should amplify human intelligence instead of replacing it, while preparing the workforce of tomorrow to co-exist creatively in the AI-driven economy of the future. Established in 2019 with funding from SUNY's Empire Innovation Program, the Institute is envisioned as an intellectual hub to facilitate and promote AI research and educational initiatives across Stony Brook and beyond.

EDUCATIONAL PROGRAMS

MS Certificate in Data Science

BS Specialization in AI and Data Science

RESEARCH INITIATIVES

AI in Neuroscience Multiscale neural modeling through imaging and machine learning

AI in Cancer Digital pathology for improved medical diagnosis and treatment

Trustworthy AI Improving computer security, and the interpretability of machine learning

AI in Energy and Sustainability Renewable energy, grid optimization, zero carbon

AI in Precision Medicine Designing targeted drug therapies

AI in Music Revitalizing the arts through machine learning and vice versa

AI in Ecology Monitoring wildlife populations through computer vision and machine learning



EDUCATIONAL AND WORKFORCE TRAINING INITIATIVES

240+ undergraduate students enrolled in AI courses, including the new AI specialization

250+ graduate students enrolled in AI courses, including the graduate certificate program in AI/data science

180 students enrolled in new digital intelligence course for science and humanities

AI and employment community outreach programs

RESEARCH HIGHLIGHTS

More than \$21 million in total funding, including:

\$4.2M DARPA grant: AI for real-world understanding

\$4.3M NIH grant: Understanding the neurobiology of Alzheimer's disease with AI

\$3.2M NIH grant: Improving fetal monitoring with AI

\$1.2M NSF grant: Predicting human behavior with machine learning

\$1.1M DOE National Offshore Wind Consortium: AI-driven wind farm design

NSF Major Research Instrumentation grant to build AI computing infrastructure

.....
TOP 10 program in computer vision, nationally
 — csrankings.org



“ These are exciting times for AI at Stony Brook University. Join us in advancing AI research and education to tackle some of the biggest challenges of our time! ”

STEVEN SKIENA, DIRECTOR

For more information, please visit
ai.stonybrook.edu



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