

Machine Learning for First Generation Students

First Generation Undergraduate Research Experiences in STEM (FIGURES)

Texas A&M University, College Station, TX
June 3-July 26, 2024

What is machine learning?

Machine learning (ML) is a branch of artificial intelligence (AI) and computer science that focuses on using data and algorithms to enable AI to imitate the way that humans learn, gradually improving its accuracy.

ML is being applied for a wide variety of applications, including speech recognition, chatbots for customer service, computer vision for autonomous driving, recommendation engines, and robotic process automation (RPA).

For example, many mobile devices incorporate ML for speech recognition and smart search (e.g., Siri) or to improve accessibility for texting.

<https://www.ibm.com/topics>

Texas A&M University's FIGURES program on Machine Learning is a National Science Foundation-sponsored year-long program for first generation undergraduate students. Participants will learn about machine learning techniques in the context of smart system design for potential industry applications.

Program objectives are to help participants to understand the research process, to acquire laboratory skills, and to be well-positioned for graduate school and career success by participating in a year-long project.

Activities will include joining a research group led by a faculty mentor, completion of an eight-week research project, participation in weekly seminars, career development workshops, and monthly research meetings. For more information, visit: <http://people.tamu.edu/~hsieh/FIGURES/>

Stipend

Each participant will receive a stipend of \$7000 for participation in the program. The stipends will be distributed as follows: Summer, \$4000 (\$500 per week for 8 weeks); fall and spring (\$300/month for 9 months). They will also receive \$150 after presenting their findings at the fall showcase, and another \$150 for presenting findings at the spring showcase. They will also receive 1.0 credit hour of undergraduate course credit.

Eligibility

Criteria for selection include: 1) neither parent or guardian has obtained a four-year degree; 2) desire to participate in research as evidenced by application responses and faculty recommendation; 3) completion of at least the sophomore year of the curriculum for an academic major in engineering, computer science, or the life sciences; 4) GPA of 3.00 or above (exceptions may be made based on review of an applicant's last 60 hours of coursework); 5) citizen or permanent resident of the U.S. or its possessions; and 6) plan to graduate no earlier than December 2025.

Interested?

To apply, complete and print out the form at: <http://people.tamu.edu/~hsieh/FIGURES/apply.html>. Send the form, a copy of your resume, an official copy of your academic transcript, and a letter of recommendation from a faculty member to: Dr. Sheng-Jen ("Tony") Hsieh, Dept. of ETID, 3367 TAMU, College Station, TX 77843-3367. All materials must be received by May 10, 2024. Notifications about acceptances will be sent out by May 24.