

NEURODIVERSITY IN TECH AT THE JACOBS SCHOOL OF ENGINEERING TOOLS TO EQUIP A FUTURE WORKFORCE

A summer internship for a cohort of autistic young adults

In the summer of 2022, an employment-training program at the University of California San Diego brought together 16 interns between the ages of 18 and 25 years old, most of whom were on the autism spectrum. For eight weeks, they worked in teams with in-person coaches, learning workplace tools, product development, and communication skills while developing educational video games. Researchers assessed behaviors such as eye contact and conversational inclusion. Supported by the National Science Foundation, interns were paid a stipend and presented their games in a celebratory showcase event at the end of the summer.

Changing lives with VR and sensor technologies

Virtual reality (VR) can be much more than a game. For those living with autism, VR can equip them with the tools necessary to function and contribute to the technology workforce. Directed by Pamela Cosman, professor of electrical and computer engineering at UC San Diego, the Neurodiversity in Tech Summer Internship Program features a crossdisciplinary team of researchers who are developing automated coaching tools to mirror a human coach in guiding autistic young adults in workplace communication and interaction. These tools include a mock job interview conducted in VR assessing eye contact and a LiDARenabled conference setup where body orientation and inclusion in multi-way conversations can be assessed through point cloud data.

The unique skill sets of autistic adults position them for success in the tech

sector. With a detail-oriented cognitive style and a willingness to stay on task particularly suitable for a virtual world, these young adults are well matched to the demands of computer programming, software testing, data science and information technology. Find out more about the program at <u>ndtech.ucsd.edu/</u>.

At UC San Diego, we believe that what we don't know today will forever change our tomorrows. Empowered by generosity and fueled by curiosity, we are unafraid to chase the unknown — to ask the questions no one has asked before and to push the boundaries of possibility. Together, we unite diverse people and unconventional perspectives to propel limitless impact. Because we know that when we come together, nothing is beyond us.

5.4 MILLION

U.S. adults living with Autism Spectrum Disorder (ASD) are often challenged with interpersonal communication and developing workplace skills. *(Centers for Disease Control)*

85%

Of those living with autism are unemployed.

6TH FOR POSITIVE IMPACT

UC San Diego is one of the best public universities in the nation for contributions to social mobility, research and service. (Washington Monthly)





Together with your philanthropic support, we can continue to challenge convention, to be the place where education passes along a spirit of curiosity and boldness to question tradition.

Learn more at giving.ucsd.edu.

For more information about the program, please contact:

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GUIDING TOMORROW'S TECH CREATORS

Join us with a gift to the Neurodiversity in Tech Summer Internship Program.

STUDENT INTERNSHIPS

» Funding for stipends will ensure the commitment of 25 ASD interns working part-time for eight weeks.

COACHING SUPPORT

» Funding will **provide financial support for the five coaches** who will work in-person guiding those challenged with ASD in interpersonal communication, product development and project management.

PROGRAM ADMINISTRATION AND RESEARCH

» Funding will **support program oversight, research, evaluation and the VR software and hardware** necessary to conduct the research for participants in this important employment-training program.

ENDOWMENT

» With an estimated 500,000 individuals living with autism expected to join the workforce in the next decade, **creating a program endowment will provide consistent funding into perpetuity** to empower and provide the tools necessary for individuals living with ASD to be successful in the tech sector.

