



Davidson Institute
Fellows Scholarship

For Immediate Release
August 15, 2023

Contact: Megan Bedera
775-997-5690
Megan@AmplifyRelations.com

NEWARK TEEN AWARDED \$10,000 SCHOLARSHIP FOR DEVELOPMENT OF A NOVEL METAMATERIAL TO ENHANCE EARTHQUAKE RESISTANCE IN CONSTRUCTION MATERIALS

Suraj Reddy Named 2023 Davidson Fellows Scholarship Winner

Newark – The Davidson Fellows Scholarship Program has announced the 2023 scholarship winners. Among the honorees is 17-year-old Suraj Reddy of Newark, Del. Reddy won a \$10,000 scholarship for his project, *ISMER: A Novel Metamaterial utilizing Micro-Architectural Engineering for Earthquake Resistance*. He is one of only 21 students across the country to be recognized as a 2023 scholarship winner.

“I am extremely grateful for having the Davidson Fellow opportunity, which allows me to connect with an entire community of brilliant peers I hope to learn from, and become acquainted with,” said Reddy. “This fellowship is a motivating experience that enhances my desire for innovation and impact. I hope that I can use this new opportunity to inspire my peers around me to take their own innovative ideas to fruition.”

For his project, Reddy theorized and designed a novel metamaterial that can enhance seismic resistance in common construction materials, such as wood and steel. Using advanced computer simulations and additive manufacturing techniques, he tested a special geometric design and found a configuration that showed outstanding seismic resistance. His project has the potential for immediate, low-cost, and scalable applications in areas prone to catastrophic earthquakes, revolutionizing building safety and potentially saving lives.

Reddy is a rising senior at the Charter School of Wilmington. In the future, he hopes to work with energy and aerospace startups to apply his research. In his free time, Reddy enjoys cooking, playing tennis, basketball, swimming, and indulging in musical pursuits, including playing the guitar and flute.

“We are proud to announce this year’s class of Davidson Fellows Scholarship recipients who have completed significant projects with the potential to benefit society in the fields of science, technology, engineering, mathematics, literature, and music,” said Bob Davidson, founder of the Davidson Institute. “The innovations and new thinking added by each class of Fellows

Cont.

serve as an inspiration for future scholars to apply novel technologies and groundbreaking ideas to solve the world's most difficult problems.”

The 2023 Davidson Fellows will be honored during a reception at the Smithsonian National Museum of the American Indian in Washington, D.C. and with a virtual project presentation ceremony in September 2023.

The Davidson Fellows Scholarship program offers \$50,000, \$25,000 and \$10,000 college scholarships to students 18 or younger, who have completed significant projects that have the potential to benefit society in the fields of science, technology, engineering, mathematics, literature and music. The Davidson Fellows Scholarship has provided more than \$9.4 million in scholarship funds to 428 students since its inception in 2001, and has been named one of the most prestigious undergraduate scholarships by [U.S. News & World Report](#). It is a program of the Davidson Institute, a national nonprofit organization headquartered in Reno, Nev. that supports profoundly gifted youth.

About the Davidson Institute

Founded by Bob Davidson in 1999, the Davidson Institute recognizes, nurtures and supports profoundly intelligent young people, and provides opportunities for them to develop their talents to make a positive difference. The Institute offers support through a number of programs and services, including the Davidson Fellows Scholarship and the [Davidson Academy of Nevada](#). For more information about the 2023 Davidson Fellows, please visit: [DavidsonFellows.org](#).

###

High-resolution photos are available at

[DavidsonFellows.org](#)