$15 Million Gift Launches Clark Scholars Program

Scholarship will support underrepresented engineering, computer science, cybersecurity students

Enabled by the largest-ever scholarship gift to Stevens Institute of Technology, the A. James Clark Scholars Program will provide financial support and enhanced learning opportunities at the university for exceptional undergraduate students who are underrepresented in the engineering, computer science and cybersecurity fields.

The program, established by a $15 million endowment gift from the A. James and Alice B. Clark Foundation, honors the legacy of the late A. James Clark, a noted engineer, philanthropist and president of the Maryland-based Clark Construction Group LLC, one of the nation’s leading privately-held construction companies.

“Mr. Clark was an inspiration, a mentor and a friend to me,” said Stevens President Nariman Farvardin, whose relationship with Mr. Clark dates back to his tenure at the University of Maryland, where he served as senior vice president for academic affairs and provost and dean of the A. James Clark School of Engineering.

Stevens joins an exclusive group of top universities selected by the Clark Foundation to implement the Clark Scholars Program, such as Johns Hopkins University, University of Pennsylvania and University of Virginia.

“We are proud to establish the Clark Scholars Program at Stevens Institute of Technology,” said Joe Del Guercio, president and CEO of the A. James and Alice B. Clark Foundation. “Mr. Clark believed in the power of education and investing in hardworking students with a drive to succeed. The Clark Scholars Program helps to eliminate financial barriers so that promising young students can receive the education and training to achieve their full potential and become tomorrow's engineering leaders.”

The inaugural cohort of approximately ten Clark Scholars will enroll at Stevens in fall 2018. The Scholars’ core curriculum, which will reflect A. James Clark’s values and service to his community, will include a rigorous program of engineering study with a minimum of two business or finance courses; participation in community and service-based learning projects; enrichment seminars; mentorship opportunities; and events with professionals in the field.

“I am profoundly honored that this program — a symbol of Mr. Clark’s legacy — will benefit current and future generations of deserving and talented Stevens engineers,” added President Farvardin.
Major New Advances In AI, Machine Learning

Technologies that harness big data are rapidly changing the world. Stevens is at the leading edge of the discipline, performing research that promises to transform the way we do business, take care of our health, commute, and much more.

- Professor Samantha Kleinberg has performed NIH-supported research to develop tools and methods that aid in the analysis of medical data, including neurological intensive-care unit data — work that may be useful in treating patients recovering from strokes.

- Student researcher Xinchao Wang is a leading expert in video analytics whose player- and shot-tracking technologies are currently utilized by the National Basketball Association.

- Computer scientist Giuseppe Ateniese led one team in a major breakthrough in understanding password security, creating a neural network known as a GAN (generative adversarial network): a set of algorithms that become progressively better as they repeat a task — in this case, guessing passwords. In tests, the tool cracked passwords more successfully than current hacking tools.

- Business professor Jeff Nickerson heads an ambitious new project that will create a wide-reaching, collaborative network of experts from diverse disciplines to discuss the future of AI in the workforce.

- College of Arts and Letters Dean Kelland Thomas uses AI to teach computers to analyze and learn human music, to the point where they can respond to live music with appropriate improvisations.

- Stevens researchers Rajarathnam "Mouli" Chandramouli and K.P. Subbalakshmi use AI to produce a string of remarkable machine learning-powered innovations, including software tools that detect deception in written text; scan corporate email and phone traffic for signs of insider trading or other financial fraud; and analyze emails, calls and social media posts for potential signs of Alzheimer’s disease.

- Computer scientist Enrique Dunn explores the analysis and exploitation of visual data — in particular, the geometric and semantic relationships found in an imaged environment, the agents interacting within it, and sensors observing it.

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**Student Success Stories**

**Innovations in healthcare, wellness, sustainable transportation attract national attention**

**Collegiate Inventors Competition Finalists**

A team of three recent Stevens alumni was one of six teams to compete in the finals of the National Inventors Hall of Fame’s Collegiate Inventors Competition, the nation’s foremost competition for innovation and entrepreneurship at the collegiate level. The team was voted by attendees as the 2017 People’s Choice Winner for their design of a touchless brain-scanning device that promises to greatly reduce complications during and after open-brain surgeries.

**Wearable Device Tops Healthcare Hackathon**

The Stevens Venture Center hosted the inaugural Digital Healthcare Hackathon, bringing together innovators and budding entrepreneurs for a weekend of brainstorming sessions, workshops, talks, networking opportunities and a pitch competition. The three-member student Team Ethyl claimed first prize for proposing a wearable device to track and support alcoholics during the recovery process.

**Rookie Surprise at Solar Boat Competition**

A Stevens student team successfully competed for the first time in the national Solar Splash competition, an intercollegiate showcase for innovative boat design. The team finished fourth overall (highest among rookie entries), placing first in the categories of outstanding hull design and outstanding drive train design. The team also garnered third-place awards in the outstanding technical report and solar slalom components of the competition.
ABOUT STEVENS

Stevens Institute of Technology is a premier, private research university situated in Hoboken, New Jersey overlooking the Manhattan skyline. Since our founding in 1870, technological innovation has always been the hallmark and legacy of Stevens’ education and research. Within the university’s three schools and one college, 6,900 undergraduate and graduate students collaborate closely with faculty in an interdisciplinary, student-centric, entrepreneurial environment. A range of academic and research programming spanning business, computing, engineering, the arts and other fields actively advances the frontiers of science and leverages technology to confront our most pressing global challenges. The university is consistently ranked among the nation’s elite for return on tuition investment, career services and the mid-career salaries of alumni.

FEEDBACK ABOUT TECHNOTES?
Email technotes@stevens.edu

Stevens in the News: Recent Highlights

8/08/2017
Forbes Tabs Stevens "Turnaround University"
A new article shines a spotlight on Stevens as “one of the most desirable STEM colleges in the nation.” Forbes attributes the “impressive turnaround” by the university, as reflected in significant enrollment increases, rising operating revenues, a growing endowment and upgraded debt ratings, in part to Stevens President Nariman Farvardin’s “willingness to break free from stodgy ivory-tower curricula.”

9/01/2017
Why Is Houston So Vulnerable To Flooding?
Big Concern is People Who Don’t Have Flood Insurance

8/31/2017
Building an H-Bomb in Plain Sight

9/05/2017
A Better Bike Helmet Might Look Funny and Be Made of New Materials

9/09/2017
7 College Presidents Receive $500,000 Awards From Carnegie Corporation

9/12/2017
Why Is Houston So Vulnerable To Flooding?

8/22/2017
How Prepared Are We for the Impact of a Nuclear War?

6/26/2017
Automation Nation: A Brief Guide to Self-Driving Cars and What They Could Do to Your Auto Insurance

8/08/2017
The First-Ever Calder Biography Reveals the Beloved Sculptor’s Radical Side

10/24/2017
Future Flooding Will Be Deeper and More Frequent and Cities Aren't Prepared

10/23/2017
Teaching Teachers to Teach Online

10/11/2017
A New AI Bot Cracked 11.7 Million Passwords

9/20/2017
10/24/2017
9/12/2017
8/31/2017
8/22/2017
8/08/2017
8/08/2017
9/09/2017
9/05/2017
9/01/2017
6/26/2017
8/08/2017
10/23/2017
10/11/2017
9/20/2017