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**STEVENS**  
INSTITUTE of TECHNOLOGY  
THE INNOVATION UNIVERSITY®



## Stevens Institute of Technology

### NSF SAVI: Institute for Cognitive Networking



[cognitive-networking.org](http://cognitive-networking.org)



[@AgileSpectrum](https://twitter.com/AgileSpectrum)

**Stevens Institute of Technology** belongs to an exclusive list of the top 25 "Most Innovative Schools" in the US, ranked #69 overall, the second fastest-rising college in the nation among the top 100 national universities. It scores Top 25 for Internships.

Funded by the U.S. National Science Foundation (NSF), Stevens Institute of Technology leads **Institute for Cognitive Networking** to promote and sustain cognitive wireless networking related research and education collaborations. A major emphasis is on the investigation of the fundamental challenges related to low cost, reliable wireless broadband access technologies for traditionally underserved areas using dynamic spectrum access/sharing/management techniques that exploit spectrum (e.g., T.V.) white spaces (WS).

#### READY FOR:



OPEN IDEAS



x2 CHALLENGES

Researchers

Innovators

3 / 6  
months

A NGI initiative

NGI Explorers Program,  
part of the  
NGI Initiative



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 825183.

Partners





## CHALLENGE #22 - SIT-MLC-01

### → Machine Learning for Cybersecurity

#### GOALS

Explore data-driven machine learning approaches to solve emerging social media security and cybersecurity problems.

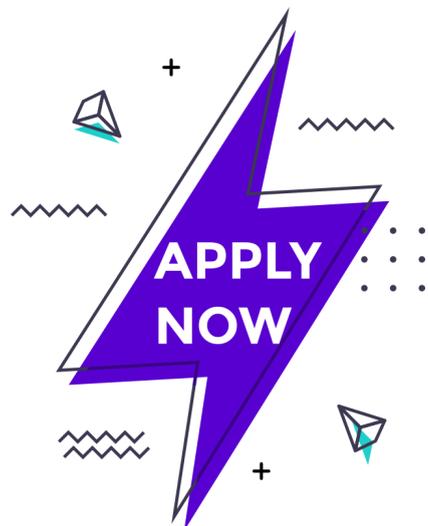
#### DETAILS

Design, implement and test machine learning algorithms to detect social media threats (e.g., fake news, deep fakes, rumor localization) and cybersecurity threats (e.g., attacks on 5G networks).

#### SKILLS REQUIRED

AI, machine learning, Python programming, social media networking, software defined networking.

Researchers	
Innovators	
Artificial Intelligence	Blockchain
Big Data	Internet of Things
5G	Cybersecurity
Cloud/Edge Computing	Interactive Technology
Future Hyper-connectivity	Human-centric Internet



**→ READ THE GUIDELINES**



## CHALLENGE #23 - SIT-5G-02

→ AI for 5G

### GOALS

Explore artificial intelligence (AI) approaches to optimize and secure 5G network architecture, protocols, and applications.

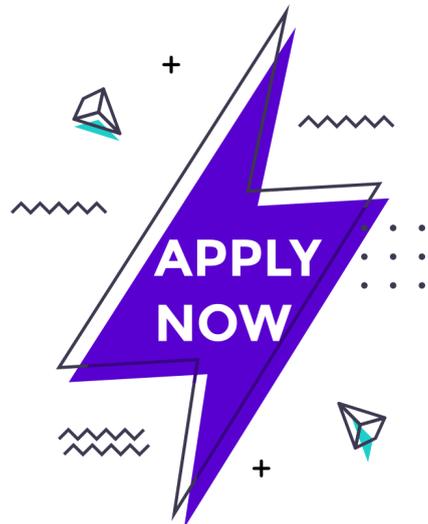
### DETAILS

The emerging 5G standard offers unprecedented flexibility to network designers. This challenge explore AI and machine learning approaches to dynamically optimize resource allocation, network slicing, edge computing, and security within the 5G context.

### SKILLS REQUIRED

Machine learning algorithms, python or similar programming experience, wireless networking.

<b>Researchers</b>	
<b>Innovators</b>	
<b>Artificial Intelligence</b>	Blockchain
Big Data	Internet of Things
<b>5G</b>	<b>Cybersecurity</b>
<b>Cloud/Edge Computing</b>	Interactive Technology
<b>Future Hyper-connectivity</b>	Human-centric Internet



→ **READ THE GUIDELINES**