World's largest online hacking competition begins next week

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Credit: Carnegie Mellon University

picoCTF, the annual free online cybersecurity competition run by hacking experts in Carnegie Mellon's CyLab, launches next week. The

competition aims to introduce young minds across the nation to the world of cybersecurity and to build a pipeline of talent to a much-needed cyber workforce. Hundreds of thousands of people have participated in previous years.

"We want to encourage students to start thinking about cybersecurity careers early on," says CyLab's Hanan Hibshi, an assistant teaching professor in the Information Networking Institute and a faculty advisor to picoCTF. "By the end of the competition, participants might discover talents that they never knew they had before."

During the competition, which spans a two-week period from March 15-29, participants will be presented with real-life cybersecurity challenges created by Carnegie Mellon's internationally acclaimed competitive hacking team, the Plaid Parliament of Pwning. Challenges are designed to start off easy and gradually increase in difficulty. If participants find themselves stumped, the competition offers hints.

Thousands of dollars in cash prizes are awarded to the top U.S.-based middle and high school teams.

While middle and high schoolers are the competition's target audience, the challenges frequently pique the interest of university-level students and even industry professionals. Tens of thousands of university students and industry professionals have participated in previous iterations of the competition.

Globally, the shortage of cybersecurity professionals is estimated to be over two million, according to a report organized by the National Initiative for Cybersecurity Education. That same report says that on average, 50 percent of hiring managers generally do not believe their applicants for cybersecurity positions are well qualified.

Given the global shortage of cybersecurity professionals, other countries have taken notice of CyLab's competition and leveraged it for their own residents. Ryerson University in Canada has sponsored picoCTF the past several years, creating its own Canada-specific scoreboard and prizes for Canadian participants. Cognitive Research Labs in Japan has sponsored the competition in recent years for Japanese participants.

This year, the African continent will have its own leaderboard and set of prizes, with CyLab-Africa—a collaboration between CyLab and CMU-Africa—serving as a sponsor. Over the past few months, picoCTF-Africa has brought African students together for training sessions leading up to the big event.

"We are extremely excited to boost cybersecurity interest in Africa and help young Africans develop cybersecurity skills," says Assane Gueye, an assistant teaching professor at CMU-Africa and co-director of CyLab-Africa. "Students will walk away with an understanding of reverse engineering, forensics, web security, cryptography, and critical thinking—all skills that are essential in the security industry."

More information: Registration: picoctf.org/

Provided by Carnegie Mellon University