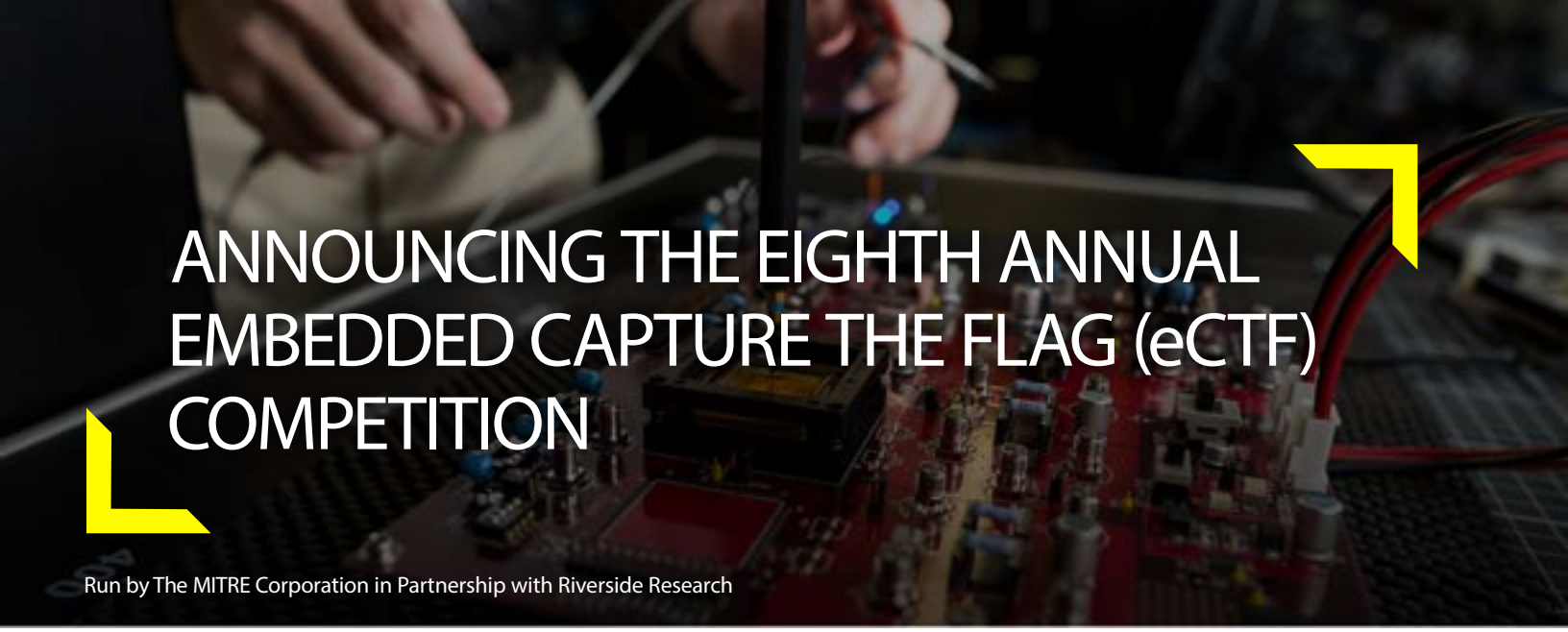

ANNOUNCING THE EIGHTH ANNUAL EMBEDDED CAPTURE THE FLAG (eCTF) COMPETITION

Run by The MITRE Corporation in Partnership with Riverside Research

Join your school's team for the 2023 eCTF

The 2023 competition will run from January 18th through April 19th with an award ceremony on April 26th.

How is this different from other Capture the Flag (CTF) competitions?

The eCTF is unique in two major ways. First, the focus is on securing embedded systems, which present an entirely new set of challenges and security issues that are not currently covered by traditional CTFs. Second, this event balances offense and defense by including a significant secure-design phase in addition to an attack phase. This competition will help you develop practical skills that can be applied securing critical systems, such as medical devices, smart grids, IoT devices, and mobile devices.

How does it work?

Competitors go through the exercise of trying to create a secure system and then learning from their mistakes. The main target will be a real physical embedded device, opening the challenge to include physical/proximal access attacks.

Secure Design	Teams design a secure system that meets all the challenge requirements.
Handoff	MITRE verifies that each submitted system has met all functional requirements. MITRE posts designs for all teams to evaluate during the attack phase.
Attack	Teams perform security evaluations of opposing teams' systems and request provisioned chips for vulnerable systems. Points are awarded for flags retrieved from successful attacks.

What is this year's challenge?

Teams will design and implement a secure key fob system for a car door lock. The system must protect the car from unauthorized entry and prevent attacks like replays and key fob cloning.

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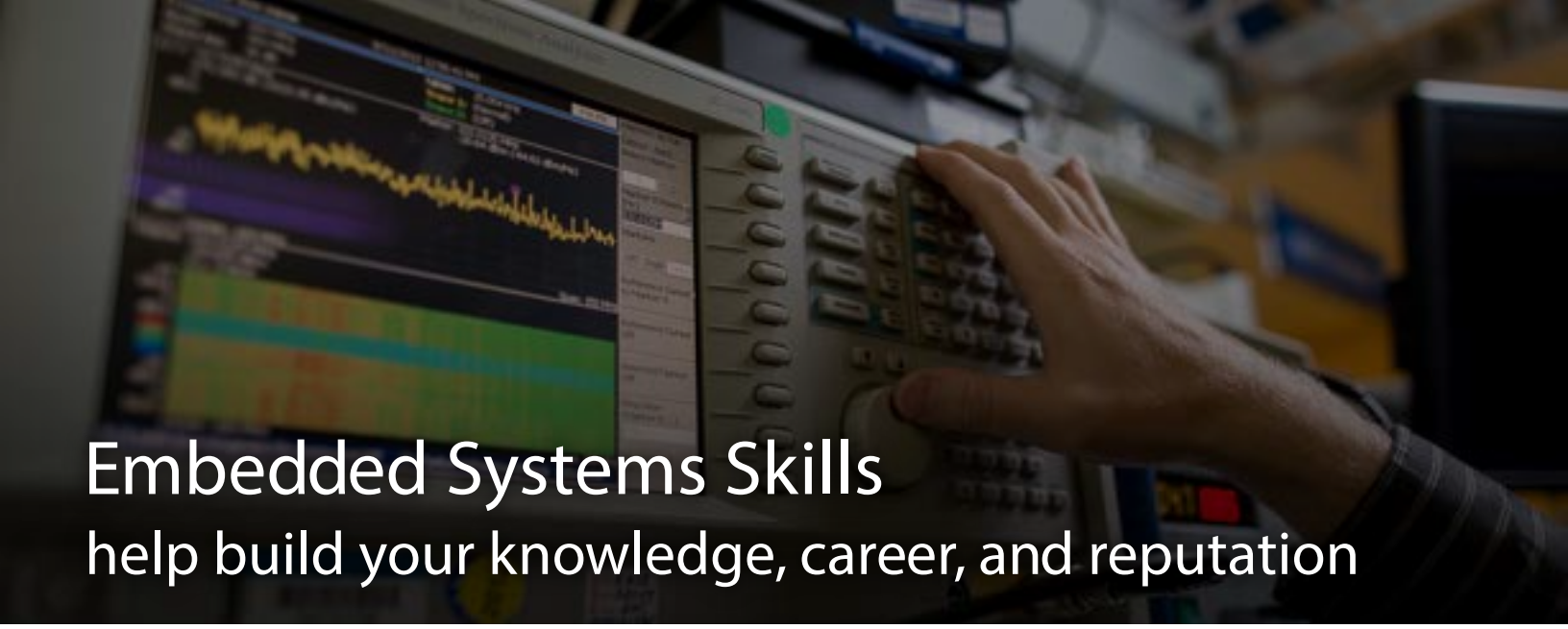

Embedded Systems Skills
help build your knowledge, career, and reputation

Who can participate?
Anyone! Students at all academic levels are welcome to participate. Team sizes are unlimited (although a minimum of 3 students is recommended). Sponsorship of a faculty member is required.

Can I earn college credits?
Work with your professor(s) / faculty advisor to determine how to earn credit at your institution. Most students can earn college credit hours. Remember that this is a significant time commitment, typically commensurate with the credit hours you may receive. An example syllabus is available from the eCTF organizers upon request.

What is provided by MITRE to help?
MITRE provides teams with a reference implementation, embedded hardware, and technical guidance throughout the competition.

Are there awards?
Winning teams receive a cash prize, publicity from MITRE, and typically earn accolades from their university as well. Students have used their participation in eCTF to build resumes, present at conferences, and open the door to valuable internship and career opportunities, including engineering positions at MITRE and competition sponsors.

How do I sign up?
For details contact your faculty advisor _____ or ectf@mitre.org.
For more information, visit https://ectf.mitre.org

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