ACSAC 2022
Cybersecurity Artifacts Competition
and Impact Awards
Cybersecurity Artifacts Competition and Impact Award

● New initiative at ACSAC 2022!

● Competition Objectives:
  ○ Further promote reproducibility of cybersecurity research results
  ○ Acknowledge efforts of authors who contribute to real-world deployment/use of novel and reliable security solutions
  ○ Award artifacts that have had a significant impact on cybersecurity research and applications
  ○ Submissions open to cybersecurity artifacts previously published in peer-reviewed venues (conferences, journals), both in academia and industry (not only ACSAC)
Cybersecurity Artifacts Competition and Impact Award

- Example of “Impact”
  - The artifact has been reused and cited in subsequent research publications presented in academic or industry venues.
  - The artifact has been released as open-source software and has received demonstrable appreciation by the security community (e.g., in the form of "stars," "forks," or other types of citations).
  - The artifact has been successfully transitioned to a commercial technology.
  - The artifact consists of an online service that is open to the public or to researchers and demonstrates a significant number of users benefiting from it.
  - The artifact has become a de facto benchmark for one or more use cases.

- Received 7 submissions and selected 5 high-quality finalists
Artifacts Competition Finalists

- 5 Finalists - Impact Award will be announced after the presentations
  - Tripwire: Integrity Scanning as Intrusion Detection
  - CUMUL & Co: High-Impact Artifacts for Website Fingerprinting Research
  - libdft: Dynamic Data Flow Tracking for the Masses
  - Tranco: A Research-Oriented Top Sites Ranking Hardened Against Manipulation
  - YourThings: A Comprehensive Annotated Dataset of Network Traffic from Deployed Home-based IoT Devices

- Short papers accompanying the artifacts competition submissions are published on the ACSAC website
Artifacts Competition Committee

● Co-Chairs
  ○ Guofei Gu - Texas A&M University
  ○ Gabriela Ciocarlie - UT San Antonio
  ○ Roberto Perdisci - Univ. of Georgia

● Committee Members
  ○ Baris Coskun - Amazon AWS
  ○ Gianluca Stringhini - Boston University
  ○ Leigh Metcalf - US Cert
  ○ Manuel Egele - Boston University
  ○ Marco Balduzzi - Trend Micro
  ○ Martina Lindorfer - TU Wien
  ○ Michael Pozmantier - NSF
  ○ Mihai Christodorescu - Google
  ○ Nick Nikiforakis - Stony Brook University
  ○ Phillip Porras - SRI

Thank You!
Final Presentations…
Impact Awards

- Awards Competition PC Assigned 2 Awards
  - Impactful System Award
  - Impactful Dataset Award
Impactful System Award goes to...

Tripwire: Integrity Scanning as Intrusion Detection

Eugene Spafford

Purdue University
Impactful Dataset Award goes to...

*Tranco: A Research-Oriented Top Sites Ranking Hardened Against Manipulation*

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\(^{(1)}\)KU Leuven, \(^{(2)}\)ICANN, \(^{(3)}\)Univ. Grenoble Alpes
Thanks to all competition participants!