## **Security Research Cluster @IISc**

We are a group of about 20 faculty members, cutting across various departments in the EECS division.

Our interests and projects cover the broad spectrum from theoretical aspects of security to practical applications.

We are also actively involved in outreach and startup mentorship in cybersecurity.

For more information, see: http://securityresearch.iisc.ac.in



# Security Research Cluster @IISc: Major areas of interest

#### **THEORETICAL AREAS**

- Cryptography, both classical and quantum
- Secure multi-party computation and applications (e.g., to machine learning)
- Information-theoretic cryptography
- Secure distributed computing

### **PRACTICAL AREAS**

- CPS security and privacy, e.g., drones and IoT devices
- Electrical grid security
- Cloud platform security
- Security and robustness of ML-based systems
- Blockchain and applications
- Software security

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# Security Research Cluster @IISc: Projects and Publications

- Our papers routinely appear in top forums, e.g., CRYPTO, EUROCRYPT, TCC, ACM CCS, NDSS, IEEE TOIT, JACM.
- We are on program committees and editorial boards of several top conferences and journals, e.g., NDSS, ACM CCS, IEEE TDSC.
- We participate in several initiatives of national interest, e.g., faculty from the cluster are part of the DST Technology Innovation Hub in Cybersecurity (led by IIT-K), and the DST Technology Innovation Hub in Robotics Automated Navigation (led by IISc)

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## Security Research Cluster @IISc: Outreach and Startups

- We routinely host workshops and colloquia featuring speakers from around the world:
  - https://www.csa.iisc.ac.in/~cris/MPCWorkshop/
  - https://events.csa.iisc.ac.in/iciss2018/
- Since 2018, IISc is the technical anchor and mentor institute for the Karnataka State Cybersecurity Centre of Excellence (CySecK): <a href="https://cs-coe.iisc.ac.in/">https://cs-coe.iisc.ac.in/</a>
  - Workshops and webinars featuring industry leaders, targeted towards the IT industry and citizens in the state
  - HACK is An Accelerator for Cybersecurity in Karnakata:
     Accelerating and incubating startups, and serving as mentors for startups identified by CySecK

