

Selected labs at Fraunhofer AISEC

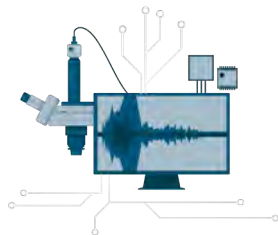
INDUSTRIAL SECURITY LAB

- Risk analysis and penetration testing for connected production, IoT and building automation
- Realistic, secure test environments
- Training and experimental systems



HARDWARE SECURITY LAB

- Hardware security analyses and penetration testing
- Common Criteria site certification for Evaluation Assurance Level 7
- Pre-audit evaluation of security chips



AUTOMOTIVE SECURITY LAB

- Security analysis for complete vehicles and vehicle components
- Secure, trusted environment certified according to TISAX AL 3
- Development and testing of security measures



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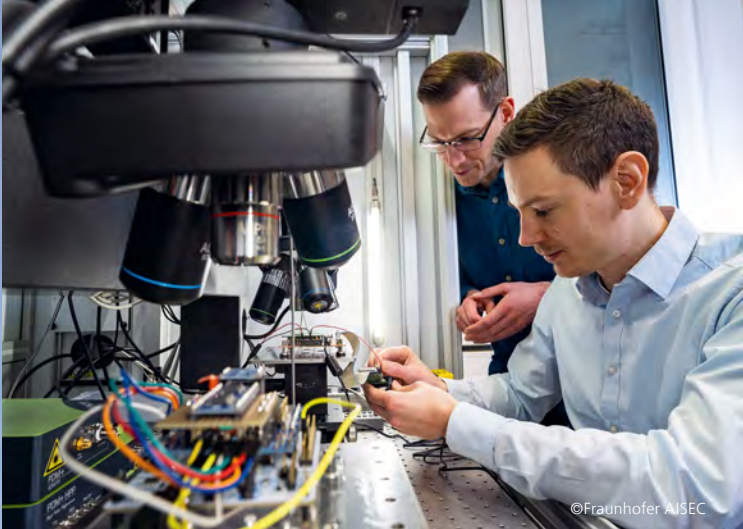
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Fraunhofer AISEC at a glance

Innovating with security

#InnovatingWithSecurity



Mission

The Fraunhofer Institute for Applied and Integrated Security AISEC translates excellence in IT security research into applied solutions for greater dependability, trustworthiness and tamper protection in IT-based systems and products.

Facts and Figures

- **Founded:** 2009
- **Employees:** 230
- **Higher Education Connections:** Technical University of Munich (Prof. Eckert and Prof. Sigl), Freie Universität Berlin (Prof. Margraf) and OTH Amberg-Weiden (Prof. Loebenberger)
- **International:** Partner institute of Fraunhofer Singapore



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Challenge for cybersecurity

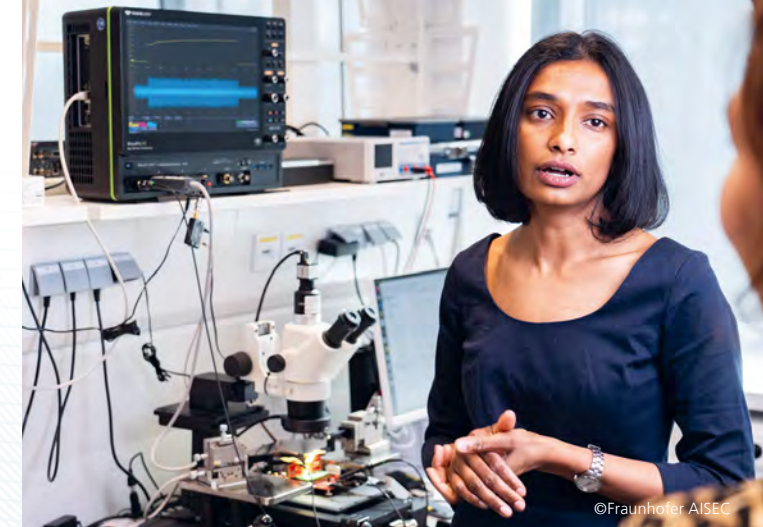
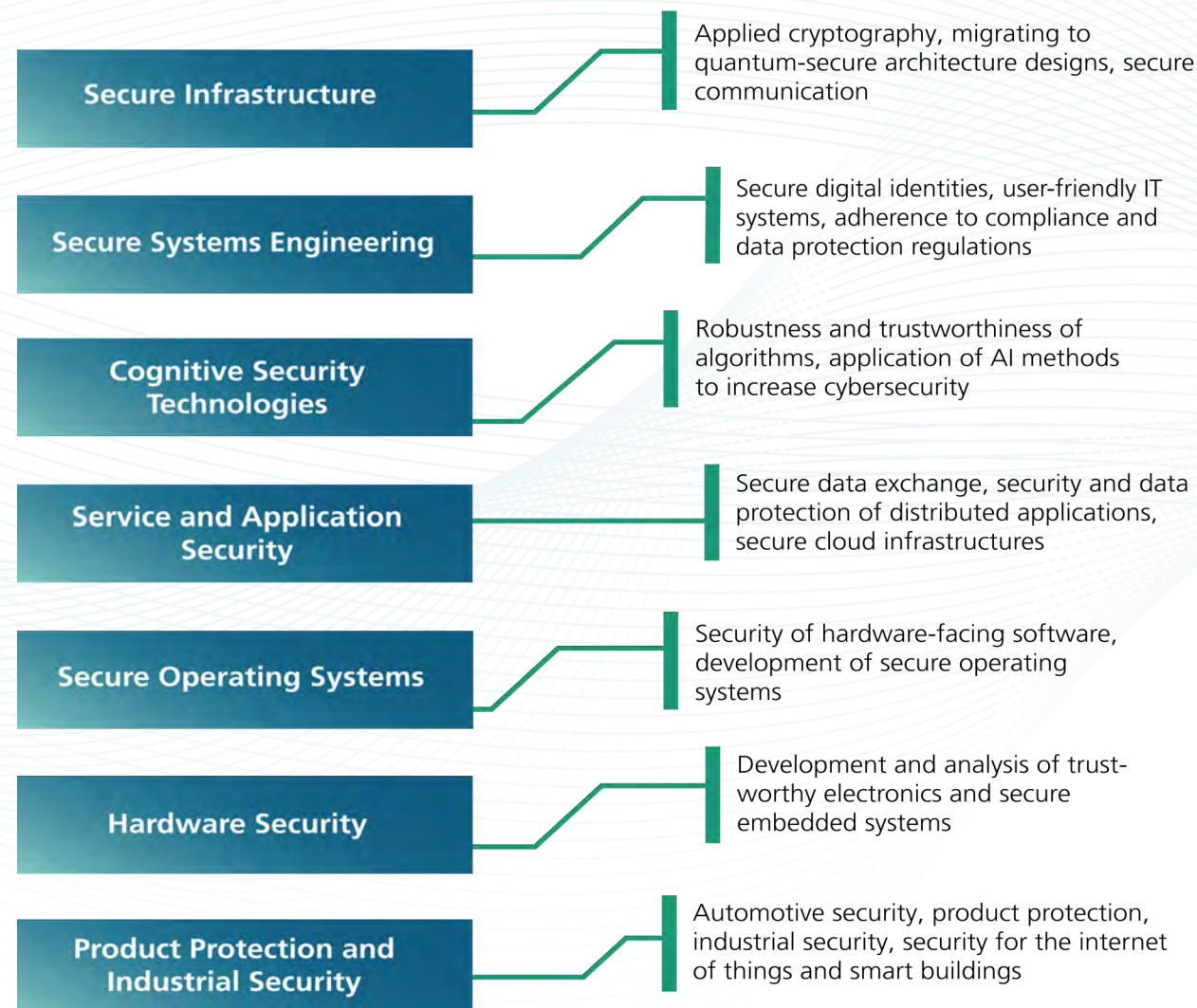
There is huge potential for innovation in cutting-edge technology, but it also presents risks for cybersecurity. Our economy and society are facing major challenges:

- Abuse of vulnerabilities in the program code
- Data manipulation and theft
- Manipulation of control units
- Automated attacks using AI and deepfakes
- Identity theft
- Threats from quantum computers
- Side channel and error attacks on chips and printed circuit boards

Fraunhofer AISEC offers specialist expertise in the area of cybersecurity based on research excellence. This allows businesses and public research institutions to strengthen their position for the future with tailor-made, state-of-the-art technologies.

Areas of expertise

Fraunhofer AISEC supports businesses in protecting systems, infrastructures, products and services.



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R&D services and opportunities for collaboration:

-  Risk analysis
-  Security tests and analysis
-  Creating and reviewing IT security concepts
-  Reference implementations in minimum viable products
-  Developing testing and analysis tools
-  Trainings and education
-  Studies and technology radar