

Cybersecurity @ AAU

# Who are we?

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- Head: Elisabeth Oswald (Prof.), Hannes Boschitz (Admin), Thomas Auer (Technical)
- Lecturers: Arnab Roy (PhD Luxembourg),
- Post doctoral researchers: Yan Yan (PhD Bristol, UK), Si Gao (PhD Hongkong, China), Partha De (PhD Melbourne, Australia)
- Doctoral researchers: Nima Mahdion (MSc, Iran), Aakash Chowdhury (MSc, India), Thomas Marquet (MSc, France), Matthias Steinwender (MSc, Germany), Rebecca Young (MSc, UK) (she is with Bristol University)
- WE ARE STILL RECRUITING for a software engineer: if you like C++, embedded devices/software, and would like to contribute to blue skies engineering, then talk to me!

# What do we do?

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Research on embedded software/devices: we are interested in crypto/security engineering aspects, i.e. how to implement crypto/security securely



Research on networking aspects: in collaboration with CSEM, we are now recruiting a PhD student who will work on intrusion detection in an IoT setting



Research on certification: we were technical lead in the so-far only EU funded project on security certification of embedded devices



Research on advanced crypto: we have contributed to the development of ciphers and are interested in symmetric crypto in particular



Research on using ML/DL for cybersecurity (see also the networking point before), but we generally have expertise in using ML/DL to detect “stuff”.

# What do you teach?

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- From next winter term onwards, we offer a full specialisation for BSc student in system security: Systemsicherheit, Cryptography, Crypto/Security Engineering, Lab
- From last winter term onwards, we offer a full MSc programme specialised to AI and Cybersecurity:
  - We emphasise the connection between the subjects:
    - AI supports Cybersecurity e.g. via advanced threat detection
    - Cybersecurity is necessary for ethical implementations of AI
  - This is a double-degree program with Udine, based on the hybrid delivery of courses
- We coordinate student projects, please get in touch if you think that you might have a project ... (paid or unpaid).

# Are you able/interested in collaborations?



YES!



We are responsible for most cybersecurity teaching at AAU, thus we are interested in collaborative projects with/for students (BSc, MSc, PhD). We are particularly interested in project with an overlap with ML/DL.



Some of us consult, this will always depend on what you are after. Don't be shy and drop me an email.



We wondered if there is an interest for a regular (but perhaps not frequent) cybersecurity coffee morning, where we review the most recent attacks/incidents and talk a bit about how stuff works?



We are of course also interested in funded projects.

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