



PhD position

Cybersecurity for Connected and Automated Electric Vehicles and Charging Infrastructure

The information security group (I-Sec) aims to translate the complex nature of cybersecurity into an easily comprehensible way to understand, monitor and control the risks of employing current and future technologies. With a strong commitment to co-designed solutions with the potential end-users, we research new ways on how to expose and present the raised implications on privacy, risk, security and safety.

You will be part of a team conducting research within multiple (European) projects aimed at cyber security & privacy, trust platforms, IoT, information communication systems, edge computing, automated & autonomous vehicles and urban transport automation.

Role

Your PhD will be carried out under a European project aimed at optimisation of electric vehicle autonomy, where it is your task to oversee, dictate and execute the cyber security aspects.

- Research the cybersecurity environment for Connected and Automated Electric Vehicles (CAEVs) and the involved energy infrastructure
- Develop cybersecurity solution(s), incorporating trusted computing and dynamic risk assessment, for the inductive charging infrastructure and the in- and out-of-vehicle communications
- Coordinate efforts with partners from European countries (academic and non-academic)

Profile

- Excellent writing, communication and presentation skills in English
- M.Sc. in Computer Science, Mathematics (or equivalent)
- Good interpersonal communication and collaboration skills
- Proficiency in Linux environments and interest in embedded systems
- Knowledge of good programming and software development practises
- Interest in the development of cyber security solutions
- Understanding of security best practices from an application development standpoint
- Ability to travel within Europe

Administrative requirement

- EU, Swiss nationality or Swiss residence permit B or C is required.

Benefits

- Good and pleasant working environment where you will be part of a team focused on cybersecurity, largely in the automotive domain
- International experience through the collaboration in European projects
- Competitive salary and additional resources to fund conference travel are available

Applications

Interested applicants are asked to send a cover letter outlining their interest in the PhD position, their CV, list of publications (if any) and two letters of recommendation to Dr. Niels A. Nijdam (niels.nijdam@unige.ch).