



CCDCOE

NATO Cooperative Cyber Defence
Centre of Excellence Tallinn, Estonia

NATO Cooperative Cyber Defence Centre of Excellence (the Centre) is a NATO-accredited International Military Organisation dealing with education, consultation, lessons learned, research and development in the field of cyber security.

Internship in the area of Industrial Control Systems

The Tallinn-based NATO Cooperative Cyber Defence Centre of Excellence is a NATO-accredited knowledge hub focused on interdisciplinary applied research and development as well as consultations, trainings and exercises in the field of cooperative cyber defence. The Centre's mission is to enhance capability, cooperation and information-sharing between NATO, Allies and partners in cyber defence. As an international and interdisciplinary think tank and training facility, the NATO Cooperative Cyber Defence Centre of Excellence brings together the legal, policy, strategy and technical cyber defence expertise.

The Intern will participate in developing the ISC/SCADA lab environment for the research, training and exercise purposes. The outcome of the internship should be a simplified model of the railway, electrical power plant or some other element of the critical infrastructure. Industry specific guidance needed for designing the model will be provided. Siemens S7-1200 PLCs will be used together with HMI systems to control the model. The task combines mechanical and electrical engineering with PLC programming and includes initial planning, prototyping and also building the working solutions. It would be possible to use the project as a base for the Bachelor or Master Thesis. One possible field of study are the vulnerabilities and attack vectors of the PLCs and HMIs.

The applicant should meet the following qualifications:

- Background in electrical engineering. Must be able to understand Volts, Amps, Ohms and Watts not only in theory but also must be able to practically measure and manipulate with these values in the lab environment.
- Must have a previous experience of using the soldering iron.
- Should have had a previous exposure to the PLC-s either in industrial, lab or hobby environment.
- Very good English language skills;
- High degree of responsibility and ability to develop solutions independently.
- Willingness to develop a working prototype solution

The exact time and the duration of the internship is negotiable, sooner is better

Please send your CV and application letter to piret.juhansoo@ccdcoe.org