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The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

# System Developer Norwegian Cyber Range (NCR), 3 years

**Faculty of Information Technology and Electrical Engineering  
Department of Information Security and Communication Technology**

The Norwegian University of Science and Technology (NTNU, <https://www.ntnu.edu>) invites applications for temporary position as System Developer. The position is affiliated with the Department of Information Security and Communication Technology (IIK, <http://www.ntnu.edu/iik>) at the Faculty of Information Technology and Electrical Engineering (IE, <http://www.ntnu.no/ie>). The position will be located in Gjøvik and affiliated with the project Norwegian Cyber Range (NCR) with a duration of 3 years.

## About the Department

The Department of Information Security and Communication Technology has 33 permanent scientific staff members, and in total approximately 80 employees. 50 persons work at NTNU's campus in Gjøvik and 30 at NTNU's campus in Trondheim. IIK carries out internationally competitive research organized in seven cross-disciplinary labs covering the academic areas of Internet of Things (IoT), Applied Cryptology, Intelligent Transport Systems, Quantifiable Performance and Dependability of Communication Systems, Biometry, Digital Forensics, and Information Security. The department provides teaching in BSc in IT Operations and Information Security, MSc programs in Communication technology and Information Security, and PhD programs in Telematics and Information Security. The department hosts and operates NTNU's Center for Cyber and Information Security, a public-private partnership with 26 members.

## Work Description

In the context of the project Norwegian Cyber Range (NCR), NTNU, in collaboration with other partners, will develop a cyber range. A cyber range is a platform for constructing infrastructures that look like operational systems and then perform cyber security exercises, and security testing processes on this infrastructure. The created infrastructures that a cyber range operates can be emulated, simulated, physical, or a combination of those. Various research and development activities at NTNU in the context of NCR are taking place. Different components of the overall platform have been developed separately in the context of other projects.

The advertised position is a member of the NCR development team. This includes supporting the overall software architecture design, development, quality assurance. The candidate will maintain the code repository, implement necessary tools and missing components, perform continuous integration and security testing.

## Responsibility

- Participate in requirement analysis and software architecture design
- Search for suitable tools, evaluate the better alternative, and develop proof of concepts
- Develop and manage the build and versioning of developed code
- Maintain the source code repository
- Develop and manage Continuous Integration processes, including for example, integration and security testing and code quality analysis

## Qualifications required for the announced position

We seek candidates that are team players, motivated and able to engage in interdisciplinary collaboration, have good communication and networking skills, are proactive and forthcoming, and able to work independently if needed.

In addition you must have:

- Bachelor degree in relevant field,
- Long work experience may compensate for formal education

Skills that will be emphasised:

- Deep knowledge of software architecture
- Deep knowledge of the cloud and REST API development
- Teamwork with internal resources and external partners
- Experience with agile software development practices and tools, such as Trello
- Experience with scripting and programming languages such as Bash, Python, C and Java
- Experience with version control systems like Git
- Experience with designing and managing databases
- Experience in Web development technologies

## Language requirements

- Proficiency in Norwegian and/or English

Applicants who do not master a Scandinavian language must provide evidence of good English language skills, written and spoken. The following tests can be used as such documentation: TOEFL, IELTS or Cambridge Certificate in Advanced English (CAE) or Cambridge Certificate of Proficiency in English (CPE).

Minimum scores are:

TOEFL: 600 (paper-based test), 92 (Internet-based test)

IELTS: 6.5, with no section lower than 5.5 (only Academic IELTS test accepted)

CAE/CPE: grade B or A.

## General terms of employment

The Department of Information Security and Communication Technology wants to attract outstanding and creative candidates who can contribute to our ongoing research activities. The university is committed to a policy of equal opportunity in employment practices. We believe that diversity is important to achieve a good, inclusive working environment. We encourage all qualified candidates to apply, regardless of the gender, disability or cultural background.

All candidates must be able to secure a residency and work permit in Norway. The appointment is subject to the conditions in effect at any time for employees in the public sector and assessments regarding the legislations regulating export control and knowledge transfer.

## Salary conditions

The system developer position is in code 1087 Overingeniør, salary grade range from 53 - 63 in the Norwegian State salary scale, gross NOK 464 800 - 555 100 per year, depending on qualifications. A deduction of 2% is made as a statutory contribution to the Norwegian Public Service Pension Fund. The national labour force must reflect the composition of the population to the greatest possible extent. NTNU wants to increase the proportion of women in its scientific posts.

## Living and working in Gjøvik

Information can be found via the following links:

- Living in the county of Oppland: <http://www.gonorway.no/norway/counties/oppland/>
- Map of NTNU in Gjøvik: <https://www.ntnu.edu/gjovik/how-to-get-here>
- About Campus Gjøvik: <http://www.ntnu.edu/gjovik>

## To apply

Applications will be processed through the university on-line application system (<http://www.ntnu.edu/vacancies>) which will direct you to [www.jobbnorge.no](http://www.jobbnorge.no). Candidates must submit the following documents in electronic form:

- A cover letter (1 page) explaining your motivation and how your skills and experience relate to the research focuses of the position applied for
- CV
- Relevant transcripts of grades, diplomas, and certificates

All this must be sent electronically via [www.jobbnorge.no](http://www.jobbnorge.no) with information about education and relevant experience (all in one combined PDF file). Mark the application IE-136/2018. Incomplete applications will be rejected.

For further information, please contact Espen Torseth or Nils Kalstad.

## Deadline for applications: 31.07.2018

Under Section 25 of the Freedom of Information Act, information about the applicant may be made public even if the applicant has requested not to have his or her name entered on the list of applicants.

Jobbnorge-ID: 155051, Søknadsfrist: Søknadsfristen er gått ut