



## Job Description

## Internship SGIS – Pen Testing (Ethical Hacking) - (TAL-SGIS20190619-001)

Primary Location Austria-Vienna-Vienna-IAEA Headquarters

Posting Date 2019-07-02, 9:30:15 AM

Closing Date 2019-07-30, 10:59:00 PM

Duration in Months: 12

Contract Type: Interns

### Duration

12 months.

### Internships

The IAEA accepts a limited number of interns each year. The internships are awarded to persons studying towards a university degree or who have recently received a degree (see Internship web pages for further details).

The purpose of the programme is:

- To provide interns with the opportunity to gain practical work experience in line with their studies or interests, and expose them to the work of the IAEA and the United Nations as a whole;
- To benefit the IAEA's programmes through the assistance of qualified students specialized in various professional fields.

The duration of an internship is normally not less than three months and not more than one year.

### Organizational Setting

The Department of Safeguards (SG) is the organizational hub for the implementation of IAEA safeguards. The IAEA implements nuclear verification activities for some 180 States in accordance with their safeguards agreements. The safeguards activities are undertaken within a dynamic and technically challenging environment including advanced nuclear fuel cycle facilities and complemented by the political diversity of the countries.

The Department of Safeguards consists of six Divisions: three Operations Divisions: A, B and C, for the implementation of verification activities around the world; three Technical Divisions: Division of Concepts and Planning, Division of Information Management, and Division of Technical and Scientific Services; as well as two Offices: the Office of Safeguards Analytical Services and the Office of Information and Communication Services.

The main objective of the Department is to maintain and further develop an effective and efficient verification system in order to draw independent, impartial and timely safeguards conclusions, thus providing credible assurances to the international community that States are in compliance with their safeguards obligations. The departmental operating environment is interactive, participative and dynamic with continuous inputs received from the Board of Governors, the General Conference, policy- and decision-makers, as well as counterparts in Member States and in the international development community.

The Development Section provides ICT services to the Department of Safeguards and Member States, working cooperatively with staff in the Operations Divisions and the Technical Divisions to plan, establish and maintain information systems. The Section specializes in providing system analysis, software design, and implementation and maintenance services. The Section follows and implements best practices in the areas of software engineering, project management and quality management and continuously monitors the Department's information related needs so that they can be met through requests for new or enhanced ICT solutions.

### Main Purpose

The intern will support the activities of the Development Section (DS) in the Office of Information and Communication Systems Department of Safeguards (SGIS). DS provides ICT services to the Department of Safeguards and Member States, working cooperatively with staff in the Operations Divisions and the Technical Divisions to plan, establish and maintain information systems. The Section specializes in providing system analysis, software design, and implementation and maintenance services. The Section follows and implements best practices in the areas of software engineering, project management and quality management and continuously monitors the Department's information related needs so that they can be met through requests for new or enhanced ICT solutions.

### Functions / Key Results Expected

The intern will focus mainly on research of security tools used for software pen testing and their integration with the DevOps team into the SGIS software development lifecycle. The intern will contribute to the office's work by facilitating the use of security tools in the software developed and/or maintained by SGIS. The intern will work with all members of the DS, providing support to the relevant activities undertaken by the Section. The intern will be expected to interact with IT specialists from other sections in SGIS.

Under the guidance of the Team Lead and in collaboration with SGIS System Analyst, the intern will perform or support one or more of the following tasks:

- Research and analyze standard pen testing software that can be used for SQL injection, cross site scripting and other common attacks;
- Help the DevOps team in enabling the integration and simplifying the usage of identified tools in the software development lifecycle;
- Work with technical IT teams to keep abreast of updates/changes to advanced software tools;
- Participate in on-going projects and activities of the SGIS groups, as instructed.

### Qualifications and Experience

- Preferred field of studies: Computer Science or related field.

- Ability to code in programming languages such as .Net or Java and the capability to write automation tools using Python or other scripting methods.
- Good analytical and organization skills and the ability to meet deadlines.
- Able to work independently and as a team member in a multicultural environment.

#### Applicant Eligibility

- Candidates must be a minimum of 20 years of age and have completed at least three years of full-time studies at a university or equivalent institution towards the completion of a first degree.
- Candidates may apply up to one year after the completion of a bachelor's, master's or doctorate degree.
- Candidates must not have previously participated in the IAEA's internship programme.
- Excellent written and spoken English essential.
- Candidates must attach two signed letters of recommendation to their application.