Claudia Ruggiero

WORK EXPERIENCE

[Dec 2017 – Feb 2018]

Intern

Unidata S.p.A. | Rome, Italy

Design and implementation of a LoRa™ Gateway Simulator to evaluate the load capacity of a LoRa Network Server. The firmware constructs UDP packets with specific configurations and sends them to the server in accordance with the rules of the LoRaWAN™ protocol for IoT networks.

EDUCATION AND TRAINING

[Jan 2023]

Master of Science in Engineering in Computer Science

"Sapienza University of Rome" | Rome, Italy

Final grade: 110/110 cum laude
Thesis: "Automatic Response Plans Generation from the Attack Graph model" Advisor: Prof. Silvia Bonomi

[Mar 2018]

Bachelor of Science in Engineering in Computer Science, curriculum "Information Systems"

"Roma Tre University" | Rome, Italy

Final grade: 100/110
Thesis: "Methodologies for load tests on new generation sensors networks" Advisor: Prof. Giuseppe Di Battista

[Sep 2007 – Jun 2012]

Scientific diploma

Lyceum "Marcello Malpighi" | Rome, Italy

INTERESTS

Network Infrastructures, Network security

Basic knowledge and usage of methods and tools for network protection (firewalls, proxy, VPN, vulnerability scanners, IDS/IPS), basic usage of attack graphs for network hardening

Basic static and dynamic analysis of Windows malware using monitoring programs, debuggers and reverse engineering techniques

Basic AI techniques (search and planning, knowledge representation and reasoning)

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING C1 **READING** C1 **WRITING** C1

SPOKEN PRODUCTION B2 **SPOKEN INTERACTION** B2

Spanish

LISTENING B1 **READING** B1 **WRITING** B1

SPOKEN PRODUCTION A2 **SPOKEN INTERACTION** A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Programming Languages

Python | Java | C | C# | Shell scripting | Javascript | Android | HTML | Assembly x86 | Prolog | CSS

Operating systems

Windows | Linux | Android OS

Databases

MySQL | PostgreSQL

Other

Unity (basic) | Git | Docker

PROJECTS

■ **Enhancement of the PANACEA human-centered approach for the automatic generation of response plans to mitigate cyber risk within enterprises**

■ **Team project: Comparison among traditional approaches and multiple deep learning techniques (neural networks) for the cancer classification in patients with TP53 gene mutations, for the Data Mining course**

■ **Team project: Efficacy evaluation of different lock implementations within GOMP (gcc openMP) using the LiTL lock interposition library, for the Seminars in Advanced Topics in Computer Science Engineering**

■ **Team project: Social network-like Android mobile application with usage and development of Cloud Services, for the Mobile Applications and Cloud Computing course**

■ **Team project: Design and development of an endless runner videogame with 3D graphics using the Javascript THREE.js library, for the Interactive Graphics course**

■ **Team project: Design of the user interface of a reward application for walking and public transportation trips according to the base human-computer interaction criteria, for the Human Computer Interaction course**

■ **Design and development of a LoRa Gateway simulator to test the performances of a Unidata LoRa Network Server**

■ **Script for the audio signal detection of sequences surrounded by white Gaussian noise, for the Software Cognitive Radio course**

■ **Team project: design and development of an Android mobile application, for the Mobile Computing course**

COURSES

[Dec 2009 – Mar 2010]

Training course in English Language and simulation in the context of the "National School Model United Nations" project at the Hilton hotel, New York (USA).

DRIVING LICENCE

Cars: B

Rome, 21 May 2023