

# Cristian Di Iorio

Nationality: Italian

EDUCATION AND TRAIN-ING

[ 17/09/2024 - Current ] Master's Degree in Computer Science

Sapienza Università di Roma

City: Rome | Country: Italy | Level in EQF: EQF level 7

[ 27/09/2021 - 19/12/2024 ] Bachelor's Degree in Computer Engineering

Sapienza Università di Roma

City: Rome | Country: Italy | Level in EQF: EQF level 6

**LANGUAGE SKILLS** 

Mother tongue(s): Italian

Other language(s):

**English** 

LISTENING C1 READING C1 WRITING C1

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

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

**PROJECTS** 

### **Automated Detection of Security-Sensitive UI Elements**

Designed a three-stage pipeline to automatically identify and tag security-sensitive UI widgets for Clickshield. Proposed using UI-CTX for static code analysis to construct UI Handler Graphs, applying a Graph Neural Network for binary classification at the graph level, and defining automatic code-level annotations to guide runtime overlay protection.

Link: <a href="https://cristiandiiorio.it/assets/pdf/dns-report.pdf">https://cristiandiiorio.it/assets/pdf/dns-report.pdf</a>

## **Keystroke Dynamics Recognition**

Implemented user authentication through keystroke dynamics using Mahalanobis Distance, Gaussian Mixture Model, and the Gunetti-Picardi method. Developed and optimized models for pattern analysis and anomaly detection.

Link: https://arxiv.org/pdf/2502.16177

#### **Arduino Current Meter - Bachelor's Thesis**

Developed a C interrupt-driven program to interface with a Dockerized receiver, enabling real-time data acquisition from a Hall-effect current sensor connected to an Arduino board.

Link: https://cristiandiiorio.it/assets/pdf/bachelor-thesis.pdf

#### **Google Drive clone**

Designed and implemented a Google Drive clone using Ruby on Rails, featuring file storage, sharing capabilities, and user authentication using Google OAuth.



**Homelabbing and Selfhosting**