Christian Sassi

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EDUCATION

Master's Degree in Computer Science, Cybersecurity - University of Trento

Expected graduation in October 2025.

Trento, Italy

Sep. 2023 - Present

Bachelor's Degree in Computer Engineering - University of Trento

Graduated with a final grade of 108/110.

Trento, Italy Sep. 2020 – Sep. 2023

EXPERIENCE

Software Engineer Intern - Embedded Systems

Feb. 2023 - Jun. 2024

University of Trento

Trento, Italy

- Validated SPARK SR1020 UWB IoT devices against their specifications, ensuring reliability and readiness for system integration.
- Enhanced real-time **UWB** communication for music streaming by developing and optimizing **C-based** software, achieving a 50% faster response time.
- Improved system performance by building a **Python script** to analyze **audio packet behavior**, providing insights to refine the **IoT software**.
- Demonstrated strong **teamwork** and **problem-solving skills** by collaborating with a team of **10 members** in a **multidisciplinary environment** to develop IoT-based solutions.

Software Developer

Oct. 2022 - Oct. 2023

Fiverr

- $\bullet \ \ {\rm Developed\ custom\ software\ applications\ in\ C/C++,\ Python,\ {\rm and\ } {\bf Java\ for\ different\ client\ needs}.$
- Managed projects for over **60 clients**, ensuring timely delivery and high-quality results.
- Maintained a 100% delivery rate and a perfect 5/5 customer satisfaction rating.

Projects

Phantom Wallet API Integration | Python, RESTful APIs

- Developed an unofficial Python library to interact with the Phantom Wallet backend API.
- Implemented and tested key functionalities, including wallet insights, token data retrieval, trending asset information, and learning resources and quests.
- Designed the library to support multiple blockchain networks, including **Solana**, **Ethereum**, **Base**, **Sui**, **Polygon**, and **Bitcoin**, ensuring **compatibility** and **scalability** across multiple ecosystems.

Domain Shift Adaptation with MEMO | PyTorch, Scikit-learn, NumPy

- Applied **Test-Time Adaptation (TTA)** techniques to improve the **robustness** of a pre-trained neural network on test images.
- Implemented Marginal Entropy Minimization (MEMO), achieving an improvement of over 3% in overall performance.

Security Testing Analysis for an E-commerce Platform

- Conducted a comprehensive static and dynamic security analysis using SpotBugs and ZAP.
- Identified and prioritized over 15 potential vulnerabilities, including SQL Injection, XSS, and CSRF, as part of a structured vulnerability management process.
- Provided a working solution for each vulnerability, improving the platform's security posture and reducing
 potential attack vectors.

PUBLICATIONS

Real-time Musical Haptics with Ultra-wideband: A Study on Latency, Reliability, and Perception L. Turchet, C. Sassi, D. Vecchia, G. Picco — Published in IEEE Transactions on Haptics on January 6, 2025.

TECHNICAL SKILLS

Languages: Italian, English

Programming languages: Python, C/C++, Rust, Java, JavaScript, HTML/CSS, SQL **Security Skills**: Injection Attacks, Cryptography, Pwn, Reverse Engineering, Web Security