

EDUCATION

- **I.T.I.S J.F.Kennedy** PORDENONE, IT
Diploma in Information Technologies, Vote: 81/100 2016 - 2021
- **Ca'Foscari** VENICE, IT
Bachelors in Computer Science 2021 - present

SKILLS

- **Languages:** C++, C, Golang, Python, Lua, TypeScript, React, Haskell
- **Other Tools:** AWS, MongoDB, Elasticsearch, Prometheus, SQL, Emacs
- **Administrative Tools:** Serverless, Ansible, Docker, Docker Compose, Kubernetes, Git, Linux, *BSD
- **Other Skills:** Binary Reverse Engineering, Web API Reverse Engineering
- **Natural Languages:** : Italian (native), English (proficient), Slovakian (second language)

EXPERIENCE

- **Technological Systems by Moro** AZZANO DECIMO, ITALY
Software Development & Penetration Testing December 2020 - March 2021
 - **Development:** Developed software components for remote monitoring based on a serverless architecture hosted on AWS.
 - **Penetration Testing:** Carried out a network vulnerability assessment and penetration test.*Reverse Engineering and Software Development* June 2019 - August 2019
 - **Development:** Developed software components for *simultaneous localization and mapping* and *automated guided vehicles* on the R.O.S. operating system; The core is written in C++ and frontend in Javascript.
 - **Reverse Engineering:** Reverse Engineered stripped firmware for an STM32 microprocessor.
- **Advanced Algorithms Summer School** CA' FOSCARI UNIVERSITY, VENICE, ITALY
Course July 2019

Attended a week-long *advanced algorithms* course at San Servolo International College for students qualified at the 2019 National Olympiad of Informatics. The topics ranged from dynamic programming to greedy algorithms and graphs.
- **Cyber Challenge 2019** UNIVERSITY OF PADUA AND PISA, ITALY
Course February 2019 - June 2019

Qualified at a national programming challenge organized by the *National Interuniversity Consortium for Informatics* at the University of Pisa and subsequently attended a 3 months long cybersecurity course at the University of Padua with topics such as: reverse engineering, pwning, web security, and cryptography. At the end of this course participated at a jeopardy CTF hosted by the organizers of the course.

PROJECTS

- **pastasciutta (WIP):** CTF atk/def infrastructure, composed by:
 - An attacker component that can orchestrate and deploy swarms of exploits through *docker swarm*;
 - A reverse proxy and host based intrusion detection system that coordinate to filter out potentially malicious connections.
- **sentry:** High performance reverse proxy and load balancer written in C++ with Lua scripting support and frontend written in Vue.
- **pka2xml (github.com/mircodezorzi/pka2xml):** Packet Tracer related tools obtained through reverse engineering.
- **loki-cpp (github.com/mircodezorzi/loki-cpp):** Modern C++ driver for Loki: a log aggregation system.
- **tojson (github.com/mircodezorzi/tojson):** Small library to convert between different data serialization formats.
- **sigol (github.com/mircodezorzi/sigol):** Go toolkit to automatically generate and deploy AWS Lambdas.
- **hort (github.com/hort):** Data hoarding and indexing framework written in modern C++.

CERTIFICATIONS

- Cisco IT Essentials, Cisco Introduction to Networks, and Cisco Cybersecurity Essentials

ADDITIONAL EXPERIENCE & ACHIEVEMENTS

- Soon to be CyberChallenge 2022 organizer at the Ca'Foscari.
- Regularly participate and organize cyber-security related meeting at Ca'Foscari.
- Participated at DefCon 28 and 29 Capture the flag competition with *Mhackeroni* and placed 13th place.
- Participate at *Capture The Flag* "hacking" competitions with Padua's *NoPwnIntended* and Italy's *Mhackeroni* teams.
- Participated at 3 national Rubik's cube competitions in Milan, Verona, and Bratislava (SK) with a personal best of 18.67 seconds.
- Won the M.I.U.R. prize at the *National Robotic Olympics* of 2019 with a remotely operated drone for environmental data collection, processing, and analysis. Presented the prototype at the Italian Ministry of Education in Rome during the National Day for the Environment.