# Alex Saletti



#### About me

Birth 21-01-1997

Based in Lecco, IT

General I am an italian boy who is fond of IoT and software development, I describe myself as a precise, flexible and reliable person; my interest in studying and learning new subjects is driven by curiosity; I like problem solving (and challenges in general) and I am considered good at teamwork, open to conversation and constructive criticism. Willing to travel on business and smartworking too.

Goals My current main goals are to move and find a job abroad, to make new experiences and meet new people in order to improve my knowledge and my person; from a business perspective, I'd like to become an experienced (full stack) developer; I would also like to improve my English and learn new languages (possibly German).

#### Contacts

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Answer within 1-2 days

Answer within 5-7 days, dismissed from 2023

Answer within 10-14 days

No answer, repositories consultation

Answer within 1-2 hours, incom. calls are filtered

#### Languages

Italian Mother tongue

English Good Certificate: TOEIC (Listening score: B2++, Reading score: C1)

### Education

2020- Computer Science and Engineering (EN), Master's degree, Politecnico di Milano

Currently I passed all the exams and I completed the master thesis (I'll get the degree on the  $20^{th}$  of

December 2022, see next section for more details)

2016–2020 Ingegneria Informatica (IT), Bachelor's degree, Politecnico di Milano

2010–2016 Liceo Scientifico Tradizionale, High school diploma, IIS Lorenzo Rota

#### Master thesis

Title Storage-accuracy analysis for CSI-based human activity detection: an IoT forensic perspective

Supervisors Professor Alessandro Enrico Cesare Redondi, Computer Engineer Fabio Palmese

Description I started working on my thesis on March 2022; my main goal is to discover a possible correlation between CSI data and what is happening in the surrounding environment and, if such correlation exists, a further goal is to develop a binary classifier that should be able to detect human movement by analyzing received (or sniffed) packets; currently we are using ESP32 modules to

generate and receive packets at constant rate, but we are testing routers as receiving devices too in order to figure out if they are powerful enough to compute CSI data analysis.

# Experience

#### Unrelated

Description	I have been doing the following jobs in order to keep up with my studies
04/2018-	Food delivery, Pizzeria II Sorriso, Torre de'Busi (BG)
03/2018- 03/2018	HP products promoter, Praesidium S.p.a., Mediaworld, Lecco
11/2017-	Shop assistant, Mediaworld, Lecco
02/2018	

## Skills and projects

#### Mathematics skills

• I like almost every branch of math, from logic and algebra to probability and statistics, geometry too; I used to tutor some high school students.

#### Computer engineering skills

- o software development and team projects (e.g. the various dev. phases including testing, some IDEs usage and Git versioning system functionality; <a href="here">here</a> [1] you can find a simple CLI multiplayer online videogame that my colleagues and I developed in Java as 3y thesis);
- o client-server and other architectures (e.g. p2p, in the aforementioned videogame we implemented a model-view-controller pattern; <a href="here">here</a> [2] you can find a 3-tier application I developed, in particular the code for DB connection and dynamic website generation using thymeleaf and <a href="here">here</a> [3] using JavaScript);
- o data (data inspection, manipulation, plotting and statistics using Pandas and MATLAB) and data bases (MySql DB creation, querying and maintenance, JDBC and basics of JPA);
- network infrastructures and networking (routing mechanisms, OSI model layers and main protocols, such as, in descending layer order, HTTP, FTP, DNS, TCP, UDP, IPv4, ICMP, ARP, IEEE 802.11), wireless networks (WiFi, Bluetooth, ad hoc networks, Mobile IP, TCP over wireless,...);
- IoT (main protocols, e.g. CoAP and MQTT, and communication technologies, e.g. LoraWAN, simulation using Cooja, packet collection and inspection using WireShark, Tiny OS and nesC basics);
- o miscellaneous: computer graphics basics (Vulkan, GLSL), distributed systems basics, advanced CPU architectures and computing infrastructures basics.

#### Programming skills and OSs knowledge

Level	Language/OS	Years	Comment
	С	5	<u>Here</u> [4] there a is full implementation of an "entity and relation manager" I wrote as part of my bachelor's degree thesis (I mainly use CLion IDE).
••••	Java	3	It's the first OO programming language I learned, I took part to a 3-people group project consisting in an online game development (socket and RMI solutions are adopted, only CLI is implemented); I also developed a website using Servlets, JDBC and Thymeleaf that can be deployed on an Apache Tomcat local server; I mainly use Intellij IDE and Git versioning tool.
	Python	2	I mostly use Pandas library for data manipulation and stats production; <u>here</u> [6] there is a collection of scripts I'm writing for master thesis in order to parse CSI data.

••••	MySQL	3	A MySQL local server hosting a DB was used as part of all my university projects requiring a persistent storage; I studied Java EE beans, transactions safety and Java Persistence API.
	JavaScript	1.5	I developed the aforementioned website in an alternative way, using Javascript instead of Thymeleaf; I used Node-Red flows for data manipulation.
•	C++	0.5	A collegue of mine and I developed a Vulkan application consisting in a missile simulator starting from a template, <u>here</u> [5] you can find the full project. I use Visual Studio and Git versioning tool.
	Windows 10/11	6	I use it for most activities except for those requiring particular environments, such as ESP32 micro-controllers programming and packets sniffing (WireShark).
	Linux	3	I used Ubuntu and currently I am using Kali most of the time.

## Additional information

Personal data (Only for Switzerland) I authorize the processing of my data in compliance with the Swiss laws processing and regulations on Privacy (LPD, N.235.1 of 19.06.92).

About this CV I hard-coded this curriculum vitae in LATEX, if you find any bugs or private repositories please report them by email; note also that printing this CV may hide hyper-textual links (e.g. contacts and Github repositories).

CV updates Current version: 27/11/22. You can check for latest version of my resume and download it by visiting my public repository at https://github.com/VLEXX/Resume