

Alessandro Righi

Curriculum Vitae

Education

- 2018–2022 **Master degree in Computer Science and Engineering**, *University of Verona*, 109/110
In my master degree program I choose to specialize in the curriculum of cybersecurity, and get into more details of the theory behind Computer Science.
- 2015–2018 **Bachelor's degree in Computer Science**, *University of Verona*, 110/110 with honors
In my bachelor degree in computer science I've got into more knowledge of all the CS aspects and their theoretical foundations, from operating systems, to databases, to networks and much more.
- 2010–2015 **Diploma of ordinary scientific lyceum**, *ISIS L.Calabrese P.Levi*, San Pietro in Cariano (VR), 80/100
During high-school I didn't touch a computer, but instead studied latin and philosophy. During this period I discovered and learned programming by myself while avoiding studying latin.

Master thesis

- title *Automation of acceptance testing for embedded IoT devices integrated with the cloud*
- supervisors Mariano Ceccato
- description Implementation of system

Experience

- 2020–today **Lead software engineer**, *IOTINGA s.r.l.*, Verona (IT)
At IOTINGA we focus on IoT and IIoT solutions. We provide to our customers 360 degree solutions, from the firmware, to the backend/cloud, to iOS/Android apps and web applications.
- 2021–today **Instructor for the CyberChallenge.IT program**, *University of Verona*
I'm one of the main organizers for the Cybersecurity training program CyberChallenge.IT at my former university. Here I train students on cybersecurity, in particular applied to web application security.
- 2018–2022 **Tutor for the Italian Olympics in Informatics team**, *AICA*, Remote
I participated as a tutor for the Italian Olympics in Informatics. Here I assisted at the training of the national team, and I helped develop software and tools used in the program.
- 2018–2020 **Organizer for the course Programming Challenges**, *University of Verona*
This is a self-managed course that we and other colleagues organized for the student to get into competitive programming and prepare for contests, such as the SWERC or Google Hashcode competitions.
- 2019–2020 **Tutor for the courses Programming I, Bioinformatics**, *University of Verona*
I assisted in the lab first-year students in bioinformatics learning programming (in C) for the first time.
- 2019–2020 **Tutor for the courses Programming II, Informatics**, *University of Verona*
I assisted in the lab second-year CS students learning Java and OOP programming.
- 2018–2019 **Tutor for the course Programming, Applied Mathematics**, *University of Verona*
I assisted math students getting into programming (in Python) for the first time.
- occasional **Farmer**
I used to help my granddad and my dad with the work in the fields, in particular regarding grape and cherry harvesting.

Archivements

- 2020 **Third place at the CyberChallenge.IT national challenge**, *University of Verona*
With my team we qualified third place at the finals for the CyberChallenge.IT program, consisting in an A/D CTF competition to which participated more than 20 other universities.
- 2020 **First place at the local CyberChallenge.IT CTF**, *University of Verona*
I qualified first at the local CyberChallenge.IT CTF finals in my university.
- 2020 **35st place at the ICPC-ACM SWERC 2019-2020**, *Télécom ParisTech*, Paris
With my team we qualified 35st to the Southwestern Europe Regional Contest (SWERC) competitive programming competition, to which participated more than 100 teams.
- 2019 **21st place at the Google HashCode word finals**, *Google European Headquarter*, Dublin
With my team we were one of the 40 teams selected to participate in the Google Hashcode finals at the Google Headquarters in Dublin. Here we arrived 21st.
- 2018 **22nd place at the ICPC-ACM SWERC 2018-2019**, *Télécom ParisTech*, Paris
With my team we qualified 22nd to the Southwestern Europe Regional Contest (SWERC) competitive programming competition, to which participated more than 100 teams.

Languages

Italian	Native speaker
English	Level B1

Technical skills

Backend	I developed multiple backends using a multitude of technologies, I've a good knowledge of SQL and NoSQL databases
Linux System administration	I've 10 years experience using GNU/Linux systems, where I experimented with a lot of distributions. I've experience administering a server and relative infrastructure
App	I've developed multiple iOS/Android applications, mainly using React Native, but also writing some native code
Frontend	I know the latest technologies and standards for writing web applications, and the main frameworks in particular React/Next.JS
Cybersecurity	I'm a cybersecurity enthusiast, I've participated in a lot of CTF competitions, and I've experience especially for what concerns web application security and networking protocols
Cloud	I've used AWS services a lot, and I've experience in designing a serverless architecture and managing IoT devices with IoT Core
Embedded	I've experience in developing firmware for 32-bit embedded microcontrollers, such as ESP-32 and similar, that interfaces with the cloud through MQTT
Electronics	I've good knowledge of digital electronics, I'm able to design simple PCBs with KiCad, and I've experience in repairing and troubleshooting

Interests

Free Software	I'm a huge supporter of the free software movement and use as much as I can open software and platforms. I use Linux since I was 15, and I've published some project on my GitHub.
Retrocomputing	I like to collect and repair pieces of old technology, and like to study how old computer systems work. I dream of owning an IBM AS/400!
DIY	I like learning to do stuff myself, I try to repair every kind of object that breaks, do electric work, hack things to make them better, from a child I always had a screwdriver in my hands.
Engineering	I'm fascinated by engineering and want to know as much as possible how every complex thing works, from bridges, to dams, electricity transmission lines, nuclear power plants, etc.
Cycling	After a day of hard work in front of a screen I like to ride my bike in the hills around my city.
Hiking	I like to hike in the mountains, observe nature and relax in peaceful places.

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Take also a look at my website <https://alerighi.it> and my GitHub page <https://github.com/alerighi>.