

I'm a **senior computer engineer** specialized in **Web, Identity Management, Security, QA and Test Automation**.

I'm currently working on a system that enables concurrent **test automation** using **virtual machines**.

Previously I worked on authentication and authorization in federated services, and developed a **web application framework for J2EE** (and J2EE applications as well). I have been **responsible** for the **Identity Management** at Politecnico di Milano and managed medium scale projects with emphasis on **software engineering**. I also taught courses for the employees (besides teaching bachelor lab courses), mentored developers and helped the recruiting process.

My education was oriented towards **system administration**, networking and in particular **computer security**. I've been a Linux user for almost 16 years and I took part in many international **computer security contests**.

I like to work in contexts that **challenge** me daily with **problem solving**, and that aims to **excellence**. I value **responsibility** and continuously work on side projects with a friend.

Jobs

2014 - now - Italian software house - **Permanent job**

I'm currently working as senior software engineer in QA and Security, developing complex test automation systems using VMWare virtual machines. I've recently redesigned the system we were using and I am re-implementing it from scratch.

Test automation and QA

I have designed and implemented a test automation system which uses Virtual Machines to test software in different conditions. I created tools for Android testing and for the creation of test reports.

Virtual Machines

Implemented solutions for automation of management of virtual machines (VSphere) with VMWare API (in Python and Ruby).

2008 - 2014 - Politecnico di Milano - **Permanent job**

In June 2008, before gaining my master degree, I've started working as software engineer in the computer infrastructure area at Politecnico where I've been involved in the engineer of complex projects and I've been in charge for the Identity Management.

Identity and access management

I have designed and developed (in team) the evolution of an authentication and authorisation system, that enabled single login and single logout between web applications and permitted integration of webapps of different technologies using webservice. The system had many features, including: groups, delegation, user registration and manipulation of identity records. In addition to the team work, I created the credential management and password recovery subsystem, and was in charge for the entire Identity Management.

Analysis and Software Engineering

I design and development in team infrastructure components and particularly a Java framework (web and client) that the developers uses to create applications (almost a hundred of web apps were deployed). I defined developing standards, technological models and systems architectures. I also developed part of the tool chain: an automated tool for the deployment of web applications and log retrieval on the Resin container (Java Swing, using smb, ftp and https protocols).

System Administration and Development

I collaborated with system administrators for server management and designed in team an high availability architecture. I profiled and performance-tested (YourKit and JMeter) web applications, to address performance problems. I also development webapps with Java Servlet Pages (MVC pattern).

Cooperation between applications

I created systems to integrate applications, including: use of single sign on; integration of external systems using webservice or database; integration with Microsoft and Linux systems using Active Directory and OpenLDAP; federated authentication using the Identity Provider Shibboleth.

Developer training, newcomers evaluation and Support

I have taught the courses for the employees of IT area and made an evaluation of the newcomers. I have given support to the developers with their designing or implementation problems. I also created informative material about logical security risks and trained developers in secure programming.

2004 - 2010 - Politecnico di Milano - **Teaching**

In addition to the engineering career, since bachelor graduation, I taught C and computer science courses in laboratories at Politecnico. Course were taken by engineering students of first and second year. Two tutors helped me in the teaching.

2006 - IBM Italy - Security & Privacy Services Area - **Internship**

During 2006 I served a computer security internship at IBM. During the internship I worked at the security certification ISO 27001 of an IBM datacenter, analyzing logical and physical security risks and developing an algorithm for risk calculation.



Education	<p>2004 - 2008 - Master degree in Computer Engineering at Politecnico di Milano <u>Thesis:</u> Testing methodology for web application firewall (Computer security) <u>Supervisor:</u> Prof. Stefano Zanero, score: 102/110</p> <p>2001 - 2004 - Bachelor's degree in Computer Engineering at Politecnico di Milano <u>Thesis:</u> Project methodology for the translation of high level specifications to VHDL (Logical Network) <u>Supervisor:</u> Prof. Fabrizio Ferrandi, score: 103/110</p> <p>1996 - 2001 - High school certificate (with science and computer courses) "Liceo scientifico Lorenzo Respighi" (Piacenza)</p>
Languages	<p>Very good knowledge of English In 2002 I passed TOEFL test with a score of 263/300.</p>
Side Projects	<p>2015 - now Cheereals (Android Application with Java backend)</p> <p>2010 - 2014 Socialtique.com - (Social network - Web Application in PHP+MySQL)</p> <p>2007 - 2008 Cobra (Framework to evaluate web application firewall's performances - Python, Mechanize, Apache, VirtualBox, VMWare, Web Application Firewalls)</p> <p>2005 - now - Computer security competitions I took part (with two victories and many good placements) with the team "Tower of Hanoi", at many international security competitions like: UCSB Intercontinental Capture the Flag, Defcon Quals, Cipher, ruCTF, etc.</p>
Hobbies and sports	<p>I'm an amateur photographer; some of my photos are published by the magazine "Luna di Traverso".</p> <p>In the spare time I like to go snowboarding, skiing, running, skateboarding and inline skating with my friends. I recently started practicing sailing. I exercise regularly at the gym.</p> <p>I like to travel, especially to know other cultures; I've been in all the 6 habited continents.</p> <p>I like music and I played clarinet for 5 years in music conservatory. I got the diploma in solfège and music theory.</p> <p>B Driving license, car owned.</p>