

# Davide Vernizzi

*Full-stack engineer*

Via Belfiore, 42

10125, Turin, Italy

☎ +39 329 2473 484

✉ [davide.vernizzi@gmail.com](mailto:davide.vernizzi@gmail.com)

Date of birth: November 23<sup>rd</sup>, 1981

Full-stack engineer with 10+ years of experience in web applications, CRM, and enterprise systems. Earlier, I obtained a Ph.D. in computer security and worked as post-doc on security of cloud computing. I can work with teams, talk to customers and deal with managers. I love debugging and teaching. Native language Italian, fluent in English and French. I love reading, traveling and cooking.

## Skills

**Front end** JavaScript, React/Flux, React Native, jQuery, ClojureScript, HTML, CSS/Bootstrap.

**Back end** Clojure, PHP, Javascript, Ruby on Rails, Node.js, MySQL, Python, Java.

**Dev ops** AWS stack, Docker, Chef.io, Vagrant, Linux, Bash.

**Enterprise Systems** PEGA PRPC, Veeva, RabbitMQ.

**Etc** Git, TDD, BDD, Vim,  $\LaTeX$ , Issue trackers (Jira, Redmine).

## Work experience

### Senior Software Engineer at Etiqa Srl

since 2016

- Together with another senior engineer, I have led the redesign of the company's main project, a custom CRM built for one of the major healthcare insurance companies in the USA. This task, which required to split the legacy Java code into microservices written in Clojure that communicate using an event bus based on RabbitMQ, took 2 months and laid the basis for all the successive developments. The system which was once made of a single Java application is now composed by 9 Clojure microservices, 2 legacy Java services and one Javascript frontend. As a result the application is now easier to maintain and develop.
- To better handle the development process of this application, a custom continuous integration/continuous workflow was created. I have contributed to design it and I actually coded part of it. Our CI/CD flow is now composed of more than 15 JenkinsCI jobs and requires no manual intervention. After being applied in the first project, the same concept has successfully been applied to all the other projects of the company.
- I twice led the migration from our existing cloud service provider to a new one. For the last migration, I have refactored our architecture using Chef.io. The resulting system is defined by a common configuration shared among all the environments, including development, QA, staging and production.
- I Personally handled the deployment in production of our largest application, defining the procedures and implementing scripts to automate them. Moreover, I am currently taking care of the maintenance of 13 production servers and 5 development and QA servers.
- I actively am contributing to our new projects by helping to write the documentation and the proposals, and by contributing to the initial design of the technical solutions.
- Since I have joined the company, I have explored virtually any new technology adopted; I have pioneered the usage of Clojure, the microservice architecture, and Chef.io and Docker for DevOps. Moreover I have investigated enterprise tools like PEGA PRPC and Veeva.
- I designed and written an internal tool that streamlined the QA operation of the company. The tool is now used by 4 QA engineers on daily basis and has been employed to run more than 100K test scenarios during the past two years.

### Senior Software Engineer at Ennova Srl

2011 - 2016

- Managed a team of 5 people for the design and implementation of an utility mobile and web application for an energy provider. The application integrates data from 5 different sources, has 6M+ contracts and 30M+ invoices. I personally wrote the most critical parts.
- Created an API that gets called 220K+ times per day with an average response time of 75 ms.
- Contributed to the digitalization of many business process for telephone companies, resulting in a dramatic increase of efficiency.

- Helped to the redesign of the CRM solution for a major telephone company. We reduced the number of multiple calls by 30% and their duration by aggregating together all the previous tools that the CRM agents used. The CRM is used by 350+ users and handles 3.5K+ tickets per day.
- Designed the cloud infrastructure used to provide services to clients. I currently am the reference for IT architecture evolution.
- Have managed a team of 6 developers, 1 designer, 1 dev ops and 1 analysts; supervised new employees; taught and enforced good programming practices such as TDD, CI and CD.

**Research Assistant at Politecnico di Torino, Computer Security Group** **2009 – 2011**

- Coordinated Politecnico di Torino participation in 3 European research projects.
- Trained many students, ranging from undergrads to Ph.D. students.
- Co-managed a team of 4 researcher in the TClouds research project
- Contributed to the concept of Trusted Channel and developed it, basing on OpenSSL.

**Consultant and Teacher** **since 2003**

- Freelance consultant in many different projects, including security, cryptographic libraries, mobile and web applications.
- Co-wrote a cryptographic library which has been used for content protection.
- Worked as teaching assistant and trained-on-the-job for many companies.

## --- Education

**Ph.D. in Computer Science** **15 April 2010**  
**Politecnico di Torino**

**M.Sc. in Computer Engineering** **5 May 2006**  
**Politecnico di Torino**

**M.Sc. in Computer Engineering** **5 May 2006**  
**École Nationale Supérieure d'Informatique et des Mathématiques Appliquées de Grenoble**