



Marco Ferrari – CV

Personal Information

Name	Marco Ferrari
City of Residence	Rome, Italy
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Website	https://ferrarimarco.info
Citizenship	Italian
Birthdate	19/04/1986

Education Currently attending a **Phd in Computer Science, Electronics and Engineering** at the University of Rome “Tor Vergata”.

Master Degree course of Computer Science and Engineering, University of Rome “Tor Vergata”, grade 110/110, Dissertation: Design and Implementation of a Monitoring and Management Infrastructure for Software Defined Networks.

Bachelor Degree in Computer Science and Engineering, University of Rome “Tor Vergata”, grade 106/110. Dissertation: Hand Recognition with the Microsoft Kinect Sensor.

Scientific High School Diploma, Liceo Scientifico Statale “F. D’Assisi”, Rome, Italy, grade 100/100.

Certifications “Reliable Cloud Infrastructure: Design and Process by Google Cloud on Coursera”. Certificate earned at Tuesday, November 6, 2018 3:14 PM GMT

“Elastic Cloud Infrastructure: Containers and Services by Google Cloud on Coursera”. Certificate earned at Thursday, October 29, 2018 8:59 AM GMT

“Elastic Cloud Infrastructure: Scaling and Automation by Google Cloud on Coursera”. Certificate earned at Thursday, October 25, 2018 7:59 AM GMT

“Essential Cloud Infrastructure: Core Services by Google Cloud on Coursera”. Certificate earned at Tuesday, October 23, 2018 10:04 AM GMT

“Essential Cloud Infrastructure: Foundation by Google Cloud on Coursera”. Certificate earned at Monday, October 22, 2018 12:23 PM GMT

“Google Cloud Platform Fundamentals: Core Infrastructure by Google Cloud on Coursera”. Certificate earned at Monday, October 22, 2018 8:30 AM GMT

“Power Searching with Google”, 2012, grade 100%.

“Basic Security In The Field”, United Nations (UN), Department of Safety and Security, 2015.

“Basic Security In The Field II”, United Nations (UN), Department of Safety and Security, 2012, 2016.

“HTML and Dreamweaver” certificate, National Research Council, Italy, 2001.

Work Experience

Solutions Architect at Google, 2018-10 - present

DevOps Evangelist, Development Specialist at Dedalus SPA, 2018-01 - 2018-09.

Junior Researcher at the National Inter-University Consortium for Telecommunications (CNIT), 2017-09 - 2017-12

Systems Engineer at the Italian Medicines Agency (AIFA), 2017-01 - 2017-12.

Software Engineer at the Food and Agriculture Organization (FAO) of the United Nations, 2012 - 2016. Title: System Integration Specialist and Senior Java Developer.

Web Developer at the National Research Council, Department of Medicine, Italy, 2010 - 2011.

Web Developer at the Associazione Geografica per l’Ambiente e il Territorio (<http://www.agatweb.it>), 2010 - 2012.

Collaboration with the National Research Council, Biomedical Engineering Institute for “Montecarlo” simulations, 2010.

Database Architect for data about Qanats in Iran, Shahrood for the University of L’Aquila, University of Milan “Bicocca” and for the National Research Council, 2011.

Basketball coach the the Polisportiva Centocelle, Roma, 2010-2012.

Basketball coach at the CSI (Centro Sportivo Italiano) Lazio, 2006-2007.

Foreign Languages Skills

Sixth Level certificate for English speakers of foreign languages of the British School, Rome, 2001.

Third grade certificate for “Spoken English for speakers of other languages” of the Trinity College, London, 2000.

Computer Science Skills

Software design: requirement analysis, data analysis, software application design, agile development, rapid prototype development, continuous integration, continuous delivery, IBM RUP development cycle, software modelling with UML, DevOps

Software quality: static code quality analysis

Languages: Java, Python, JavaScript, SQL, XML, HTML, CSS, LESS, SCSS, C, C++, .NET (C#), PHP, OWL

Java Frameworks: Spring, ZK, Dagger

Frontends: Bootstrap

Python Frameworks: Django

Java ORM Frameworks: Hibernate, ORMLite

Mobile platforms: Android

Project Management: Apache Maven, Gradle

Version Control Software: Microsoft VSS, Mercurial, Apache Subversion (SVN), Git

Integrated Development Environment: Eclipse, pyEclipse, JetBrains Pycharm, JetBrains IntelliJ IDEA, Microsoft Visual Studio, Microsoft SQL Management Studio, Android Studio

Database: Oracle DBMS, Microsoft SQL Server, MongoDB, Round Robin Database (RRD), MySQL, PostgreSQL

Configuration Management and Provisioning: Ansible, Chef, Consul

Virtual Machines management: Packer, Vagrant

Containerization and Container Management: Docker, Docker Compose, Docker Swarm, Kubernetes

Platforms: IBM FileNet, WSO2, JBoss Data Virtualization

Search technologies: Apache Lucene, Apache Solr, Elastic suite

Web services development: REST, SOAP

Application architecture: Service Oriented Architecture (SOA), Event Driven Architecture (EDA), Hypermedia as the Engine of Application State (HATEOAS), Microservices

Networking and net virtualization: Performance evaluation, Software Defined Networking

Java Application Servers: Apache Tomcat, JBoss

Web Servers: Apache httpd, Nginx

Infrastructure Compliance Testing: Serverspec, InSpec, Test Kitchen

Community Contributions

Stackoverflow: <http://stackoverflow.com/users/653462/ferrarimarco>

GitHub: <https://github.com/ferrarimarco>

Docker Hub: <https://hub.docker.com/r/ferrarimarco>

Achievements (Phd, CNIT)

- Design and development of a SCADA ("Supervisory Control And Data Acquisition") cyber security system - Scissor Project;
- Migration of the existing Scissor Project infrastructure from a Virtual Machine-based approach to a modern fully virtualized and containerized infrastructure;

Work Achievements (FAO)

- Design and implementation of the FAO Digital Registry System, composed of a Microsoft Sharepoint backend and Microsoft Outlook Add-in
- Design and development of the FAO Support Data REST API, that provides administrative information to other corporate applications;
- Development of IT Workpackage Blueprint plugin for Atlassian Confluence and Atlassian Jira;
- Design of software development standards and guidelines for the CIO (IT) division;
- Migration of legacy FAO Administrative applications to Microsoft Sharepoint environment;
- Maintenance, support and development for IBM FileNet platform, with IBM Records Management plugin;
- Administration and maintenance of the central FAO code artifacts repository;
- Administration of the FAO Continuous Integration environment;
- Administration of Upland Powersteering cloud instance for CIO;
- Design and implementation of the World Information and Early Warning System (WIEWS) for FAO Agriculture (AG) Department;
- Design and implementation of the 2nd Global Plan of Action (GPA2) system for FAO Agriculture (AG) Department;
- Collaboration in designing and implementation of the Food And Agriculture Policy Decision Analysis Tool (FAPDA) system;
- Participated in the design and development of the system that collects

and catalogues information produced by FAO employees, complete with search functions and secure access management;

- Developed the Automatic Categorization Engine (ACE), that allow users to insert records in the Record Management System, deployed to all FAO HQ workstations in every division;
- Development and maintenance of the Records Management Modernization Project (RMMP) platform;
- Developed the software for and supervised operations of the migration from the DRMS Public Folder recordkeeping structures to a new environment, the DRMS Backup Manager
- Developed search and access controls in the DRMS Backup Manager environment with Apache SOLR platform.

Work Achievements (AIFA)

- Analysis and completion of the existing documentation about the IT Infrastructure;
- Design and development of the user interface and web service of the Central Medicines Database;
- Design and development of web services for the collaboration with external entities like the Ministry of Economy and Finance, the Ministry of Health and the European Medicines Agency;
- Analysis and design of Spending-PHA, a system used to monitor and control the pharmaceutical expenditures from a national and a local point of view;
- Analysis of the needs of the Agency in relation to the Public Connectivity System;
- Supervision and administration of the application infrastructure monitoring solution;
- Design of the platform and supporting infrastructure for the cooperation with external entities using web services;
- Supervision of the activities of external software developers;
- Design and development of the Document Management System;
- Federation of authentication and authorization systems;
- Writing of the guidelines to produce terms of contract about IT infrastructures, application infrastructures and related management activities and software components;
- Analysis and design of the necessary activities to migrate applications, services and solutions to new data centers, possibly managed by different contractors;
- Pre-purchase evaluation of hardware solutions.

Work Achievements (Dedalus)

- Design of Dev<->Ops collaboration processes with BPMN notation;
- Automatic provisioning and configuration of Kubernetes clusters;
- Configuration Management and compliance testing automation;
- Setup of Continuous Integration pipelines;
- Implementation of DevOps methodology;
- Teaching activities: Distributed Version Control, Version and Release Management, Continuous Integration, Continuous Delivery, DevOps;
- Migration of legacy development infrastructures to modern CI/CD ones;