

# curriculum vitae of Roberto Patrizi

## Personal Informations

First name **Roberto**

Last name **Patrizi**

City, Country of birth Rome, Italy

Citizenship Italian

Residential city Rome, Italy

## Main Professional Domains

Information Technology, Digital Economy

Specific topics Big Data, Cloud, Real Time Manufacturing Analytics, Machine Learning, Digital Marketing, Intellectual Property Regulation, Infonomics/Data Monetization, Digital Payments, Industry 4.0, Platform Economy

Cutting-edge technologies IBM Watson & Cloud Platform (certificated), R, Python, Apache Spark 2.3.0 (Streaming), Hadoop, NetworkX, TensorFlow, Tableau, KNIME, MongoDB, MySql/MariaDB, Wolfram Mathematica

Current project Big Data Manufacturing Analytics system for laminated glass production. Role: Big Data Scientist

Other technologies Oracle, SQL Server, MS Access, SQL, Fortran, Pascal, Cobol

Main methodologies Math modeling, Stochastic simulation, BPMN / UML, ER Data Modeling

Working methodology and Personality Because of my rigorous scientific education and my wide and deep experience, I am able to integrate business, technology and scientific methodologies in many domains, business, organization and ICT systems.

My strong personality and my professional approach make me able to pursue and achieve my goals. My belief in communication and in organization, allow me to work in team with success in challenging situations.

I also like to teach; I continuously receive appreciation from students and professors.

Short Profile In 1981, I commenced my career in the domain of Information Technology. From software developer, analyst and project leader in various software companies. In 1998, I became the President and CEO of Informatica SpA, which I directed until 2011, as President and CEO. I managed strategic operations at a high level of stakeholders. I succeeded in 4 M&A strategic operations, so in 2010 the company was acquired by 5 companies and reached the result of 50 millions euros in income, on public market. I graduated in Mathematics in 2001, with the best score from Sapienza University, collaborated with the Mathematics Department, specifically on Numeric Analysis and published academic papers in Applied Mathematics.

In 2012, developing new professional interests in the digital economy, I started my current position as Marketing Manager. I also started academic collaborations in Digital Marketing.

University, where I became appointed in January 2016, as *Cultore della Materia*. From January 2014 - March 2016 I worked as Chief Financial Officer, and from April 2016 onwards I have been working as Business Scientist.

Current roles Business & Data Scientist

**Cultore della Materia in Digital Marketing at Sapienza University**

Public and private organizations dealt with

**Bottero SpA, Infocert, Cassa Nazionale Forense, Ministero dell'Interno, ENI, Telecom Italia, WIND, Vodafone, 3, Ministero di Giustizia, Camera dei Deputati, SELEX-ELSAG, ABB, World Food Programme, Engineering, Oracle, HP, IBM, Ericsson, Capgemini**

Best projects Recent:

- Big Data Manufacturing Analytics system for laminated glass production. I have been using Python, Tableau, MariaDB, NetworkX, TensorFlow.
- Education for a large Italian organization across the Italian country. This organization has over 500 agencies. Courses are given by video-conference and in the classroom. I have implemented processes and their compliance with Payment Service Directive so called PSD2, ERMIS, and their compliance with Service Directive 2 (PSD2) and decreasing financial fees. In this project I have been using techniques by R.
- Strategic Industrial Plan 2018 – 2020 for a large IT software solution provider. For this project I have implemented machine learning regression techniques, implemented by R and KNIME.
- Financial process analysis and reorganization in order to exploiting opportunities offered by Service Directive 2 (PSD2) and decreasing financial fees. In this project I have been using techniques by R.
- Research project: "Consumers' behaviors in online music consumption" in collaboration with Sapienza University (North Carolina – USA). I am using R tool for statistical analysis on data from surveys and social media, in order to discover causes of illegal downloads.
- Readiness and Assessment Maturity Model for Industry 4.0
- Business Plan of a Digital Business Ecosystem in the Cultural & Entertainment field (in progress)
- Economic and Industrial assessment and simulation of industry 4.0 paradigm application for manufacturing companies (R Studio, MS Dynamics, SQL Server)
- Data Monetization feasibility on Entertainment domain (R Studio, SAP, Oracle)
- Big Data Analytics system in the digital music Industry (R Studio, SAP, Oracle, Qlik)
- Feasibility and business plan of the constitution of an Electronic Money Institution (EMD) 2010/110/EU, EMD – Electronic Money Directive, (MySQL, Excel, Wolfram Mathematica)
- Feasibility of a Digital Platform for a unique access to Italian e-Justice (2015 - 2016)
- Software Prototype for a two-sided market catalog of a TELCO operator (MySQL, Oracle, 2015 / 2016)
- Legal and software requirements for an high-quality driver simulator compliant with Euro NC (2016)

Past:

- Call center workforce management optimization, in collaboration with Aquila University (2002 – 2005)
- Machine Learning project research with Sapienza University (2002 – 2005)
- Oil & Gas fees' agency network planning and optimization (2002 – 2005)
- Vulnerability Assessment and Mapping at World Food Programme in Rome (1995 - 1997)
- Data Warehouse of mobile devices maintenance for Telecom Italia Mobile (1997 - 2001)
- CRM for Telecom Italia Mobile (1997 – 1998, Oracle, Visual Basic, C)
- Enterprise Databases integration, Telecom Italia (1995 – 1997, IBM/MVS, DB2)
- Data networks planning and optimization (1994, IBM MVS, DB2, MPSX)

- Oil & Gas production plan optimization (1986 – 1990, IBM MVS, IMS/DL1, Many educational projects on ICT field, developed for large companies, including graduates (1892 – 1985)

## Professional experiences

April 2016 – Present	Business & Data Scientist
January 2016 – Present	Cultore della Materia in Digital Marketing at Economics Faculty at Master Degree in Management delle Imprese University of Rome “La Sapienza”
January 2014 – March 2016	Chief Financial Officer at 01 Tribe Srl
May 1994 - October.2012	Manager at several companies of the Nous Informatica Group
September 2007 - March 2013	CEO at CORITED Scientific Consortium (with Federico II University of Naples)
September 1998 - March 2010	Vice President at CERTIA Scientific Consortium (with Tor Vergata University in Roma)
Nov. 1991 – April 1994	Project Leader at Consulsistemi SpA
May 1986 - October 1991	Project Leader at Spectrum SpA
September 1985 – April 1986	IT Manager at EUREST SpA (now SODEXO SpA, ex Wagon Lits Group)
May 1981 – August 1985	Developer, Analyst and Teacher at Logica SpA

## Education

Recent online certifications

IBM:

- IBM Watson and Clodu Platform Foundations

University of California, San Diego (USCS)

- Machine Learning with Big Data
- Big Data Integration and Processing
- Big Data Modeling and Management Systems
- Introduction to Big Data

Johns Hopkins University

- Exploratory Data Analysis
- Getting and Cleaning Data
- R Programming
- The Data Scientist’s Toolbox

Stanford University

- Machine Learning

2001 - 2005

Assistant Supervisor at Mathematics Degree of Sapienza University for degree's theses :

- Numeric solution of Fermi-Dirac integrals
- A numeric method for eigenvalues calculus of Fredholm-Stieltjes integral linear equations

2001

Mathematics Degree, with the best score, from Sapienza University in Roma, thesis "A numeric method for solution of Fredholm integral linear equations"

- Attendance at many courses, seminars and workshops in marketing, Software Engineering, Company Law

Professional interests

Machine Learning, Big Data

SPID - Sistema Pubblico di Identità Digitale (DPCM del 24 ottobre 2014)

Regulation 910/2014/EU on electronic identification and trust services for electronic transactions in the internal market (eIDAS Regulation) adopted by the co-legislators on 23 July 2014

Digital Payments: Directives 2007/64/CE, 2009/110/CE, 2015/2366/UE (PSD2)

Multi-sided market business models

Intellectual Property Protection. Directive 2014/26/EU on

February, 26<sup>th</sup>, 2014, on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online use in the internal market

Codice dell'amministrazione digitale - CAD - Decreto Legislativo 7 marzo 2005, n. 82 e s.m.i.

### Languages

Native

Italian

English

Upper intermediate

French

Lower Intermediate

### Academic experiences

#### Management Science and Digital Marketing, from July 2015

Assistant supervisor of some Master's Theses at Economics Faculty of Sapienza University:

Seminars:

- June 2018: Chatbots & Surroundings - New Frontiers of Artificial Intelligence
- November 2017: Big Data for Financial Market
- June 2017: Chatbots - New Frontiers of Artificial Intelligence
- November 2016: "Intellectual Property and Competitive Advantage in the Digital Economy" on November 28th, 2017 (online at

<https://youtu.be/Qa-97kYuGQs> and  
<https://youtu.be/wMuEAH4CPC0>).

Supervisor of theses on Master Degree in Companies' Management:

- New frontiers of chatbot: conversational commerce. Case study: dynamic computation of willingness-to-pay by deep learning algorithms
- Upcoming scenarios over B2B marketing enabled by Machine Learning
- AI and Big Data as undeniable tools for marketing innovation: the case of Visual Listening in order to detect visual mentions about brands over social media
- Social listening as new tool to support digital marketing innovation
- Payment Service Directive 2: upcoming scenarios in the digital payment service's market
- Innovative marketing solutions in order to encourage legal music consumption (partnership with Lenoir-Rhyne University, Hickory, NC, USA)
- Secondary Ticketing as secondary marketing or illegal market=
- The ChatBots and the new frontiers of Marketing
- The new supply chain in Industry 4.0. A fact-finding survey.
- Two-sided markets and Network effects: Marketing in the Platform Economy
- Big Data as Intellectual Property's enhancement tool
- Mobile vertical wallet: a tool for enhancing the show industry
- Big Data and Personal Data, new tools for supporting marketing strategies: the music market case study
- New payment tools – Mobile Digital Wallet"

Study and research on: Digital Economy, Intellectual Property, Two-sided market business models, Digital Business Ecosystems.

**Mathematics, from 2001  
until 2009**

Co-author of scientific articles on applied mathematics. During those activities I wrote many simulation's software programmes by Mathematica of Wolfram Research:

- P. NATALINI - R. PATRIZI - P.E. RICCI: Eigenfunctions of a class of Fredholm-Stieltjes integral equations via the inverse iteration method, JOURNAL OF APPLIED FUNCTIONAL ANALYSIS, Volume 1, Number 1 January 2006, ISSN:1559-1948 (PRINT), 1559-1956 (ONLINE), online at [http://www.eudoxuspress.com/JAFA\\_VOLUME\\_1-06.pdf](http://www.eudoxuspress.com/JAFA_VOLUME_1-06.pdf)
- P. NATALINI - R. PATRIZI - P.E. RICCI: The Dirichlet problem for the Laplace equation in a starlike domain of a Riemann surface, Numer. Algor., 49 (2008), 299-313, online at <http://dblp.uni-trier.de/pers/hd/p/Patrizi:Robert>
- P. NATALINI - R. PATRIZI - P.E. RICCI: Heat problems for a starlike shaped plate, Applied Mathematics and Computation, 215 (2009),

495{502, online at <http://dblp.uni-trier.de/pers/hd/p/Patrizi:Robert>

- R. Patrìzi: Un modello econometrico per la gestione dei ricavi di un operatore telefonico mobile (AIRO News luglio 2005)
- R. Patrìzi: Un modello matematico per la definizione delle curve provvigionali ottime per la remunerazione di agenzie di vendita del settore petrolchimico (AGIP Petroli, 2003)