## Marcello Morchio



R&D Manager, leading Machine Learning projects Born in 1968 Master Degree in Electronics Engineering Living in Genova, Italy

Married with 2 grown up children

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## Summary

Our power is the power of the team we build. Durable results are never achieved in isolation. Building effective teams is the bigger challenge for a manager in the technical area. My aim is to work in a team of competent people, with positive attitude, enthusiasm in continuous learning, willing to cooperate and supporting each other. Working in, building, and leading such a team is my best motivator, along with keeping the technical grip on the industry evolution, both at the strategic level and on the nuts and bolts in the key areas.

I am currently leading the main Data Analytics and Machine Learning projects in my organization, targeting the study and implementation of data driven tools to improve 5G telecommunication network service.

I see the development of Machine Learning and AI competencies as a great opportunity for individuals and for the local high-tech ecosystem, thus I founded the <u>datascienceseed.com</u> meetup and association, fostering knowledge sharing, community learning and why not, business opportunities. Here is a half-serious video of a recent talk of mine on my journey in AI/ML, and the genesis of the meetup: <u>https://vimeo.com/394383932</u> (in italian only, sorry!).

## Work Experience

From January 2017 to present <b>System Manager,</b> <b>Scrum Master</b> Optical Solutions and Front Haul, PDU Transport, Business Unit Radio, Ericsson.	As <b>System Manager</b> , I am responsible for the design of test tools for quality assurance of Ericsson Radio System products, including concept, test and product introduction.	
	I am driving projects in the <b>Data Analytics</b> and <b>Machine Learning</b> areas, targeting the study and implementation of data driven tools to improve 5G network service. The focus areas are	
	- Predictive maintenance of optical networks	
	- Al driven fault analysis in network synchronization	
	My innovation projects have been showcased in the R&D Italy Innovation Day event, in the Ericsson corporate AI/ML Summit (Stockholm) and in the 5G Transport Summit (Gothenburg).	
	As a <b>Scrum Master</b> I am serving in an Agile team of developers, hands in the tech stuff and taking care for the optimization of performances and the improvement of development processes and best practices. Definition and tracking of objective KPIs is an important part of my job.	
From March 2013 to 2016	Lean manager of a line of 25+ engineers, organized in multi-competence	
Lean Manager, HW&SW	teams developing Optical products. The role includes coaching and	
Optical & Metro (O&M) Ericsson.	growing individuals' and teams' competencies, fostering the ability to self- organize in an efficient way, optimizing the workflow and increasing efficiency.	
	The teams under my responsibility were covering HW, SW Drivers and Firmware, applications and protocol stacks. I managed a team of 30 engineers in Czech Republic focused on product maintenance.	
	My role included some formal Project <b>Management</b> assignments, mainly to drive task-force efforts to solve critical Customer Support Request.	
	Aside the product assignments I led several innovation projects in Machine Learning, Robotics and IOT with local companies, research	

dell Ricerche, and startups. From 2011 to 2013 Management of a team of HW designers, organizing teams to maximize the result in terms of cost quality and time to market, driving and Line Manager, HW R&D optimizing design process, including manufacturing and 3rd parties Optical & Metro (O&M) relationships, such as FPGA design and consultancy companies. Ericsson. Among my assignments I supported the introduction of Agile & Lean approach in the O&M organization, and I managed the change program for HW development. From 2007 to 2011 Line management of multi-competencies R&D organization in Broad Band Access, Genova. Directly involved in the development of the Line Manager, HW R&D residential and business Ericsson access product, covering from Broadband Access (BBA) POTS/VOIP and ISDN to xDSL and optical access (Ethernet and PON). Ericsson. In addition to the line management tasks I had the following assignments: External Partners Manager: driving relationship with offshore partners in India and Taiwan. Project manager: responsible for the Transfer Project to the Italian organization from the Ericsson site in Denmark, closed during 2010. HW Technical Coordinator for Next Generation Access Node study and convergence of platforms across sites in Italy, Denmark, USA. From 1999 to 2007 Technical coordination and team leading for HW development in Marconi access platform. Development, validation certification, maintenance and **Technical Coordinator, HW** cost reduction of products, leading and coordinating the R&D team and R&D dealing with manufacturing, vendors, SW teams and Verification teams. **DATA IP & Voice networks** I have been involved in maintenance and troubleshooting activities for Marconi Communications. products, working both in central offices for troubleshooting and in direct customer facing, for customers like Telecom Italia, Wind, Cable & Wireless. From 1994 to 1999 My career in Marconi started as SW developer, involved in the early development of the ATM technology prototypes and products. HW and Firmware designer, Participated to the development of video broadcast network with Telecom R&D Italia Marconi Italiana. As HW designer and team leader I participated to the development of first ADSL products in Marconi. From 1993 to 1994 My first job after graduation was as SW development consultant in the Artificial Intelligence field, developing an expert system for road traffic Consultant management, in an international project Automa scrl

institutions such as Istituto Italiano di Tecnologia and Consiglio Nazionale

## Main trainings and seminars

July 2019 UNIGE	PhD Course: Deep Learning: A hands-on introduction
June 2018, <b>UNIGE</b>	PhD Course: Machine Learning: A Computational Intelligence Approach
June 2018 KDM Force	Introduction to Machine Learning – Internal training in Ericsson
2017-2018,	I am extending my technical competencies with on-line trainings on Data

MOOCs.	Analytics and Machine learning trainings, with special focus on Python libraries:
	Fast.ai MOOC
	Cousera:
	Reinforcement Learning Specialization
	Udemy:
	<ul> <li>Deep Learning A-Z Hands On Artificial Neural Networks</li> </ul>
	<ul> <li>Machine Learning A-Z: Hands Oh Python &amp; R in Data Science</li> </ul>
	<ul> <li>Python for Data Science and Machine Learning Bootcamp</li> </ul>
	<ul> <li>Interactive Python Dashboard with Plotly and Dash</li> </ul>
	<ul> <li>Data Analysis with Pandas and Python</li> </ul>
	Artificial Intelligence for Business
	EDX:
	<ul> <li>Analytics in Python (University of Columbia)</li> </ul>
2013, <b>Ericsson / PDI Ninth House</b> .	Leadership for Results Training for candidates to Leader of Leaders position
2011, <b>Ericsson</b> .	Leadership @BNET Training for managers and leaders focused on people management and coaching
2007,2008	Leadership Core Curriculum
Ericsson / Read Thread	Training for managers and leaders focused on people management, interpersonal, change management, performance development.
	Education
1987-1993	
Università degli Studi di Genova	Degree in Electronic Engineering, 110/110 Cum Laude Experimental thesis on dynamic algorithms for recognition of hand-writing Publication: Incremental learning experiments with SCRIPTOR (Machine Vision and Applications/Springer-Verlag Heidelberg, 1995)

Interests

The passion in connecting talents to generate innovation opportunities is not only part of my professional tasks: In the track of **Machine Learning** and **Data Analytics** I founded in 2018 the **Data Science Seed** initiative (<u>www.datascienceseed.com</u>) connect to support growing and spreading data science competencies in tight connection to the business needs of the digital transformation, with meetup, challenges, seminars and from June 2019 a Deep Learning Group. In November 2019, our team scored 3<sup>rd</sup> in the IREN Hackathon of the C1A0 event in Genova.

I am co-founder of **TalenTour**, a non-profit organization devoted to the development of motivated people and organizations. We foster technical and social innovation involving SME, startup and talented individuals.

Outside technology interests, I am improv actor and hiker. I am committed to social and voluntary projects in the local area, supporting and fund-rising for victims of the frequent flooding emergencies in Liguria. I love reading of science fiction, traveling, and spend quality time with my family.