# Daniele Mantovani

Senior Software Engineer at IF Informatica

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# Summary

Software Engineer / Architect specialized in design and implementation of web applications and services. I've also a bit of experience as DBA and BI consultant. Experience as manager of R&D groups of people and related activities. Good passionate of computer languages (C#, C++, JavaScript, Python, ML, F#, Prolog, ...) and programming paradigms (object-oriented, functional, logic). Deep knowledge of the .Net Framework, C#, data modeling. Deep knowledge of JavaScript, HTML, DOM manipulation, Ajax, tips & tricks related to web development, ... I love also to stay informed about news from the world of technology and science. Passionate of theoretical aspects of computer science. Experiences in research activities related to Artificial Intelligence (knowledge representation, Machine Learning and information retrieval). I've accumulated a good experience as trainer teaching at University. Ability to coordinate a team of people and managing relationship with the academic world. Planning and monitoring of projects and activites. I've also experience in software selection and recruitment. Experience related to online advertising, SEO, e-commerce.

# Specialties

Software architectures, programming languages and paradigms, negotiation, team coordination, evaluating technologies, R&D, planning and cost estimation, project monitoring, software and tecnology consultant, hard worker, flexibility, Microsoft technology stack, .Net Framework, C#, SQL Server, IIS, ...

# Experience

## Senior Software Engineer at IF Informatica S.r.l.

January 2014 - Present (1 year 1 month)

## Technical Advisor at AlgorithMedia S.r.l.

January 2014 - Present (1 year 1 month)

#### Contract Professor at Università del Piemonte Orientale

January 2003 - Present (12 years 1 month)

During these years I have taught: data modeling and database design, web technologies (XHTML, CSS, XML, XSLT), programming languages (C#, JavaScript, SQL, Python), .Net Framework platform, cloud computing and distributed architectures (HTTP protocol stack, web services, REST, ...), LINQ, F#, parallel programming, asynchronous programming

1 recommendation available upon request

#### CTO at AlgorithMedia S.r.l.

February 2012 - January 2014 (2 years)

### CTO E-Commerce at Triboo S.p.A.

May 2011 - January 2012 (9 months)

## Research & Development Manager at Triboo S.p.A.

January 2009 - January 2012 (3 years 1 month)

Head of research and development activities of the entire Triboo group and direct responsible of the people involved in this area (15 people), software selection / technology evaluation, supervision of many projects, technology consultant for the companies of the group, help to solving complex problems, technical evaluation of the incubated projects / companies, manager of the relationship with Universities, recruitment of the technical staff.

4 recommendations available upon request

### Software Architect and Technical Advisor for Microsoft technologies at NICE

November 2007 - April 2009 (1 year 6 months)

Software architect and technical advisor for Microsoft technologies applied to High Performance Computing. Working on a project that aims to use Microsoft SharePoint as a front-end for the administration and monitoring of a computing cluster.

## Technical Manager at ITALCOM SpA

September 2008 - January 2009 (5 months)

Technical Manager of the group of people involved in the following areas: knowledge management, e-commerce, RFID technology, business intelligence. Driving the technology strategy, planning of activities, team coordination.

1 recommendation available upon request

#### Manager of the relationship between ITALCOM and the academic world at ITALCOM SpA

May 2001 - January 2009 (7 years 9 months)

Manager of the relationship between ITALCOM and the academic world (University of Piemonte Orientale and University of Turin)

## Senior Software Engineer, Technology sniffer and evaluator at ITALCOM SpA

May 2000 - August 2008 (8 years 4 months)

Design and implementation of a knowledge management product running inside a browser. Early adopter (since 2000) of AJAX techniques. Delivery of knowledge management projects: banking and insurance, hospital & health care, manifacturing companies. Sniffer and evaluator of products and technologies related to the company mission.

2 recommendations available upon request

#### Software Developer at ITALCOM SpA

March 1998 - April 2000 (2 years 2 months)

Development of ERP projects. DBA and Business Intelligence consultant.

## Teacher of database concepts at Scuola di Applicazione dell'Arma

May 1997 - March 1998 (11 months)

During the military service, teaching assistant for the database course (relational algebra, entity/relationship, normal forms, theory of functional dependencies, SQL) and trainer for the laboratory. [ Course for military officers of the Transmissions Corp. ] http://it.wikipedia.org/wiki/Scuola\_di\_Applicazione http://www.esercito.difesa.it/siti\_scuole/torino/index.html

### Software Developer at Centro di Informatica Medica (Ospedale delle Molinette)

December 1996 - May 1997 (6 months)

Working on a prototype of a computerized clinical diary, usable to collect and classify data of patients. D. Mantovani, M. Marzuoli, F. Molino. "Diario clinico computerizzato. Caratteristiche strutturali e modalità operative.", Progettare per la Sanità N. 41 (1997); 84-97.

## Certifications

## **Machine Learning**

Coursera License Final Grade: 100% January 2014

# **Projects**

**PGCommerce** 

April 2010 to December 2010

Ferrari Store US

July 2011 to December 2011

#### RighTarget

February 2012 to October 2012

# Languages

#### **English**

# Skills & Expertise

.NET

**C**#

 $\mathbf{C}$ 

 $\mathbb{C}++$ 

F#

**SQL Server** 

**PostgreSQL** 

**MySQL** 

**Object Oriented Design** 

**Functional Programming** 

**Machine Learning** 

**Software Project Management** 

R&D

**Cloud Computing Distributed** 

**Architectures High** 

**Performance Systems** 

**Recommender Systems** 

**Artificial Intelligence** 

**Theoretical Computer** 

**Science Parallel** 

**Programming Mediation** 

**Hard Worker** 

**Technical Training** 

**Technical Recruiting** 

**Technology Transfer** 

**Scalability** 

**JavaScript** 

**XML** 

HTML5

**Advanced** 

**CSS AJAX** 

**Program Management** 

**Customer Relations** 

**Amazon Web Services** 

**Algorithms** 

ML

**Teaching/mentoring** 

**Computational Intelligence** 

**Collaborative Filtering** 

**Text Mining** 

extjs

**Online Advertising E-**

commerce Keyword

**Advertising Keyword** 

**Analysis Behavioral** 

**Targeting Data** 

Mining

Goal Oriented

Architecture

**Negotiation** 

### **Publications**

#### Ricorsione di coda e CLR

UgiDotNet April 26, 2005

Authors: Daniele Mantovani

L'articolo fornisce una introduzione al concetto di chiamata ricorsiva di coda e mostra il supporto fornito dal CLR in tal senso, ovvero l'istruzione IL tail

## Lambda expressione funzioni currificate

UgiDotNet July 9, 2006

Authors: Daniele Mantovani

L'articolo fornisce una introduzione al concetto di funzione currificata, caratteristica tipica dei linguaggi funzionali, e mostra come sia possibile implementare la compilazione currificata di una lambda expression.

## Diario clinico computerizzato. Caratteristiche strutturali e modalità operative.

Progettare per la Sanità 1997

Authors: Daniele Mantovani, Marina Marzuoli, Francesca Molino Progettare per la Sanità N. 41 (1997); 84-97

### Leveraging dynamic typing through static typing

Italian Conference on Theoretical Computer Science September 19, 2012

Authors: Daniele Mantovani, Albert Shaqiri, Paola Giannini

Implementing more than a trivial application in JavaScript (or any other dynamically typed language) can cause problems due to the absence of type checking. Such problems can lead to unexpected application behaviour followed by onerous debugging. Although dynamic type checking and automatic type casting shorten the programming time, they introduce serious di?culties in the maintenance of medium to large applications. This is the reason why dynamically typed languages are rarely used for more than just prototyping and quick scripting. We propose to deal with these problems using dynamically typed languages as "assembly languages" to which we translate the source code from F# which is statically typed. In this way, we take advantage of the F# type checker and type inference system, as well as other F# constructs and paradigms such as pattern matching, classes, discriminated unions, namespaces, etc. There are also

the advantages of using an IDE such as Microsoft Visual Studio (code organization, debugging tools, IntelliSense, etc.). To provide translation to di?erent target languages we introduce an intermediate language. This is useful, for instance, for translating to Python that does not have complete support for functions as ? rst class concept, or for translating to JavaScript, using or not libraries such as jQuery. The paper is organized as follows. We ?rst introduce the syntax of the core of the intermediate language. Then, we present the translation from F# to this intermediate language, and from the intermediate language to both JavaScript and Python. We do this via some examples that highlight the features of the intermediate language and the di? erences between the two target languages. Then, we briefly discuss correctness, and implementation. Finally, we compare our approach with related work, and discuss plans for future work.

# Education

#### Coursera

Machine Learning, 2013 - 2013

### Scuola di Applicazione dell'Arma

1997 - 1998

### **School of Theology**

Theology, 1992 - 1996

# Università degli Studi di Torino

Master Degree, Computer Science, 1992 - 1996

### Istituto Tecnico Industriale "A. Volta" - Alessandria

Computer Science, 1987 - 1992

## Honors and Awards

Master degree vote: 110/110 cum laude with honors. Best degree thesis in Computer Science (academic year 1995/96 - University of Turin) http://www.unito.it/unitoWAR/page/istituzionale/speciali1/Anni\_1995\_19981 Interests

Computer Science and, more generally, science. Trekking. Mountains.