

Eric Miotto | Curriculum vitae

Bay Area – California (US)

 edymtt • Last updated on 2024/12/31

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Summary

I've been a software developer for 15 years, fueled by a passion for computers I had since I was little.

I am well versed in picking up new technologies, either to contribute to an existing product/process or to assess their suitability for a given task. I learned (and forgot) a lot of them during the years, and for most part I retain their underlying principles.

I quickly troubleshoot issues with the software/infrastructure I deal with, even with little/no previous context – either by technical means or by involving/escalating to the right people.

I employ theory, experience and pragmatism to deliver software within the constraints given. This is not always easy, but each time I learn from my mistakes and I get a little better in understanding tradeoffs.

I'm aware I have still room for improvement – for this reason I practice new skills, revise known ones, keep up to date with trends, and take inspiration from apparently unrelated fields like psychology and economy. The roles I fit best are Software Engineer and Software Engineer in Test (or equivalent roles). I would be interested in working on operating systems, compilers, developer tools, platforms, real-time/embedded systems and videogames.

Work experience

Apple Inc

Cupertino (California, US)

Compiler Infrastructure Engineer, www.apple.com

01/2019–Ongoing

Support and improvement of the quality of the Swift compiler (and the clang compiler to a lesser extent)

- Troubleshooting, maintenance and development of the build system used to generate Swift toolchains, both internally and in opensource – CMake, Python, ninja, zsh/Bash
- Triage and qualification of new Swift and clang compilers for inclusion in Xcode, and for building iOS/iPadOS/tvOS/watchOS and macOS

Apple Inc

Cork (Ireland)

iOS Build Engineer, www.apple.com

01/2014–01/2019

Execution of daily software builds of iOS and its related products.

- Troubleshooting of build, integration and infrastructure issues
- Contribution of small fixes to the tooling used – Perl, Shell

BEDIN Shop Systems srl

Cornuda – TV (Italy)

Programmer, www.akite.net

10/2009–01/2014

Development, maintenance and support of software for Points of Sale (.NET 3.5/4.0):

- development and deployment of smart clients – Windows Forms, SQL Compact, SQLite, Lucene.NET, ClickOnce
- development, deployment and monitoring of web services handling thousands of users – Windows Communication Foundation (WCF), Windows Azure, SQL Azure, Windows Azure Service Bus, ACS 2.0
- promotion engine; development of a library for video and photo capture from webcams (DirectShow); setup of a build server (Jenkins, MSBuild); development of a simple administration web site (ASP.NET MVC, Javascript, jQuery); migration of source code from Team Foundation Server to GitHub; basic programming of fiscal printers and EFT-POS; initial introduction of unit testing and automation practices; setup and customization of Thinkecture IdentityServer and AuthorizationServer

BEDIN Shop Systems srl

Cornuda – TV (Italy)

Training – apprentice programmer

Summers from 2003 to 2008

- Development and maintenance of software for Points of Sale (.NET 2.0/3.5)
- Implementation of a visual editor for documents and labels made in GDI+, using a retained mode graphics system
- Investigation on WPF as an alternative to Windows Forms

Education and training

Università degli Studi di Padova

Padua (Italy)

Laurea Specialistica (Master's Degree) in Computer Science, 110/110 cum laude

10/2007–09/2009

Online and approximate algorithms, concurrency, distributed systems, cryptography, semantics of programming languages, static analysis, data warehouse, business intelligence, multimedia, hypermedia, audio/video compression, bioinformatics, real-time systems, information retrieval, wireless networks, ITIL v2, abstract algebra, constraint programming, machine learning

Università degli Studi di Padova

Padua (Italy)

Laurea Triennale (Bachelor's Degree) in Computer Science, 110/110 cum laude 10/2004–09/2007

Programming, algorithms, software engineering, relational databases, SQL, XML, probability, statistics, logic, operational research, programming languages, linear algebra, mathematical analysis, computer architectures, operating systems, networks, automata, numerical analysis, artificial intelligence, discrete mathematics, security

Istituto Tecnico Industriale Statale Luigi Negrelli

Feltre – BL (Italy)

High School Diploma, Computer Specialization, 100/100

09/1999–06/2004

Computer science, mathematics, electronics, statistics

Skills

Methodologies

Object oriented paradigm, functional paradigm, design, profiling, distributed systems, compensation, bug tracking, test automation, single responsibility principle, unit testing, separation of concerns, build automation, backward compatibility and versioning, legacy code, refactoring, troubleshooting, timely escalation of issues, debugging, code reading, Getting Things Done, mentoring, rudimentary time management

Technologies

These are in addition to the ones practiced in my work experience

vim, XML, regular expressions, Git, Make, rake, HTML 5, CSS, Javascript, Jekyll, Bootstrap, Linux (Ubuntu, Fedora, Debian), Touch typist (Self-taught, QWERTY, mostly italian layout, about 47 words-per-minute), LaTeX, Markdown, Textile, Powershell, Unity

Languages

Italian: Mother tongue

English: Fluent

Able to handle written and spoken technical conversations

Masters thesis

Title: *Challenges in the Integration of domain-specific and scientific bodies of knowledge in Model-Driven Engineering*

Supervisor: Prof. Tullio Vardanega

Outside examiner: Prof. Gilberto Filè

Description: Technological investigation about problems and tools needed to introduce Model-Driven Engineering in the construction of software, in particular in the real-time field. The investigation was conducted within Eclipse (EMF, GMF, Papyrus).

Bachelors thesis

Title: *A high-available service oriented architecture* (Un'architettura orientata ai servizi che offra alta disponibilità)

Supervisor: Prof. Gilberto Filè

Outside examiner: Prof. Massimo Marchiori

Industry supervisor: Davide Bedin

Description: At BEDIN Shop Systems srl (Cornuda – TV, Italy) development of a prototypal application for log transmission according to SOA principles using Windows Communication Foundation (WCF) and Amazon Simple Queue Service (SQS). For the development I used unit testing, integration testing and coverage report