Alessandro Candolini

Curriculum Vitæ

Work experiences

September 2014 – now

Spotlime, *Mobile software engineer*, Milan, Italy.

I am responsible of the implementation design, development, QA and release of native Android application for Spotlime, a startup that provides an app to discover the best events in Milan and Rome. Experience in: client-server synchronization, sqlite, activity-service communication, credit card payment, integration with social channels, analytics, maps and geolocation. Knowdledge of SDKs: Facebook, Google Play Services, AppsFlyer, android ORMLite, GSon, EventBus. Working alongside marketing team to deliver a product closer to real user needs, promoting solutions that helps improving user experience in response to end user feedback and analytics data. Working alongside server-side and iOS developers to coordinate the upcoming releases. Company website: `http://www.spotlimeapp.com/it/home/`. The app is freely downloadable from Google play store: `https://play.google.com/store/apps/details?id=com.gooutsrl&hl=en`

October 2012 – August 2014

Usablenet - leading global mobile and multi-channel technology company., *Lead Quality Assurance Analyst*, Udine, Italy.

After few months working as a quality assurance analyst, I have soon become quality assurance team leader at Usablenet, a multichannel technology company. My roles include:

- working in synergy with web developers, project manager, solution engineer team and client to consistently deliver high-quality products that fulfills customer expectations
- monitor and track project status during all steps, to meet deadlines and ensure all scope changes, variances and contingences that may arise during the projects lifecycle were visible to all people involved
- be a go-to person in the team.
- Ability to prioritize and track multiple projects in parallel, manage allocation of resources within the team, supervise and support my team activities
- test plan and test cases creation using TestLodge
- promote new strategies to speed up effective communication among all teams involved in the project, improving workflows and defining new internal procedures
- debugging and monitoring of customized web analytics solutions and technical requirements (for example requirements involving akamai technologies)
- developing small scripts (mainly using Python+JQL) which help to retrieve project information from Jira and provide automatic statistical reports about project status

Personally responsible as QA analyst of: Camelot Group (UK National Lottery, including the launch of the mobile website for the new lotto raffle on October 2013), Dell Inc. (22 countries around the world including US, UK, China etc), FedEx, MaryKay, Selfridges, Surfstitch and many others. Proven ability to work under pressure responsibly and fulfilling high expectations. I have been involved in 247 QA support, which requires ability to quickly gain familiarity with unknow projects, providing insights which help to spot the root cause of the issues and testing if it has been solved successfully. Company website: `http://usablenet.com/`

via Monte Grappa 44 – 33100 Udine (Italy)
+39 333 4387420 • Skype: alessandro.candolini
alessandro.candolini@gmail.com

2006 – 2012 **University of Udine**, *Teacher (on call)*, Udine.
I have been asked to teach the *Esercitazioni guidate di Fisica per il Corso di preparazione al Test di ammissione alla Facoltà di Medicina e Chirurgia* at the University of Udine (support training lectures organized for students who have to perform the examination test to enter the first year at the faculty of Medicine).

September 2011 – August 2012 **R.U.E. Risorse Umane Europa (no-profit association)**, *IT technical expert (on call)*, Udine.
Handling the IT issues in a small office (5 employees): pc, network and website maintenance

January 2010 – December 2010 **Consorzio per la Fisica**, *LaTeX 2ε typesetter*, Trieste.
I typeset prof. E. Gozzi lectures notes for his course of Quantum Mechanics. The notes are currently available at `http://www-dft.ts.infn.it/~gozzi/QM2.pdf`

February 2008 – May 2008 **I.N.F.N. (Istituto Nazionale di Fisica Nucleare)**, *C++ developer as volounteer*, Trieste.
Development of a object-oriented C++ library for uniform and non-uniform pseudo-random number generations, including some state-of-art algorithms

Education and training

September 2009 – now **Master student in Theoretical Physics**, *University of Trieste*, Trieste (Italy), Not completed yet.
Not completed yet due to work. I have successfully done exams including: advanced statistical mechanics, field theory, advanced mathematical methods and computational physics, including C++ implementation and comparison of symplectic algorithms for numerical integration of ordinary differential initial valued problems in classical molecular dynamics and monte carlo simulation of statistical mechanics system like Ising model

September 2009 **Bachelor's degree in Physics**, *University of Trieste*, Trieste (Italy), 110/110.
Thesis title: *Simulazione numerica dello stress termomeccanico in un ellissometro*. Advisor: Prof. E. Milotti. Description: Numerical investigation of the influence of laser beam-pointing fluctuations on the thermomechanical stress-induced birefringence in the optical ellipsometer of PVLAS experiment. The thesis required 1 year of advanced C++ programming including the development of an object-oriented library for finite-element analysis in rectangular domains and numerical integration of Ito stochastic differential equations. Thesis available (in Italian) at `http://www.infn.it/thesis/PDF/getfile.php?filename=3304-Candolini-triennale.pdf`

July 2005 **Scientific high school diploma**, *Liceo Scientifico Statale G. Marinelli*, Udine (Italy), 100/100.
High school's thesis in Physics: *Approccio spazio-temporale globale alla teoria quantistica e formulazione di Feynman della QED*. Advisor: Prof. F. de Stefano

Continuing Education

December 17, 2014 **Machine Learning**, *Coursera*.
Statement of Accomplishment of Machine Learning course by Professor Andrew Ng from Standford University. Website of the course: `https://www.coursera.org/learn/machine-learning/home/info`

20 August 2013 - 23 August 2013 **School on Supersymmetry and Unification of Fundamental Interactions (Pre-SUSY 2013)**, *ITCP*, Trieste (Italy).
Attended the School on Supersymmetry and Unification of Fundamental Interactions as partecipant. Website of the school: `http://presusy2013.ictp.it/`

13 May 2013 - 17 May 2013 **Workshop on Ultracold Atoms & Gauge Theories**, *ICTP*, Trieste (Italy).
Attended Workshop Ultracold Atoms & Gauge Theories as partecipant at the International Center for Theoretical Physics (ICTP). Webpage of the course: `http://cdsagenda5.ictp.trieste.it/full_display.php?ida=a12184`

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20 August 2012 – 24 August 2012 **Workshop on Majorana Fermions, Non-Abelian Statistics and Topological Quantum Information Processing**, *ICTP*, Trieste (Italy).
Attended Workshop on Majorana fermions, Non-abelian Statistics and Topological Quantum Information Processes as partecipant at the International Center for Theoretical Physics (ICTP). Webpage of the workshop: `http://cdsagenda5.ictp.trieste.it/full_display.php?email=0&ida=a11183`

February 2010 **Lectures of Introduction to Bayesian methods**, *University of Trieste*, Trieste (Italy).
I attended *as volountear* the Ph.D. course of Introduction to Bayesian methods (Prof. E. Milotti). Lectures addresses Ph.D. students in Physics at university of Trieste. Topics covered include: Bayesian inference, Maximum-Entropy and its applications to image restoration, EM algorithm, Markov-Chain Monte Carlo, introduction to naive Bayesian learning and Bayesian classifiers (AUTOCLASS). Webpage of the course: `http://wwwusers.ts.infn.it/~milotti/Didattica/Bayes/Bayes.html`

Other experiences

2000-2007 **A.F.A.M. (Associazione Friulana di Astronomia e Meteorologia**, Remanzacco, Udine (Italy).
Data reduction of VHF radio forward scatter meteor observations and detection of Jupiter decametric radio emissions (as a part of NASA's radio JOVE project). Data reduction for meteor activity were published monthly on the official RMOB bolletin and, at least in one occasion, cited in a referred paper by Alastair McBeath: WGN **31**:264–68 (2003). Observations on Quadrantids were published in a referred paper.
Several small projects of statistical data analysis and data visualization in C and C++. Created teaching notes about Io-Jupiter radio emissions for the AFAM website. Webpage of the AFAM radioastronomy group is (in Italian) `http://www.tng.iac.es/users/boschin/RadioAFAM/`

Scholarships

2009 **University College for Sciences "Luciano Fonda"**, Trieste (Italy).
I won the scholarship in Physics for academic achievements. The evaluation of the candidates was based on an oral examination and the documents supporting the application (curriculum vitæ et studiourum, certificate indicating the exams sat and the marks obtained and two letters of presentation).

2005–2008 **University College for Sciences "Luciano Fonda"**, Trieste (Italy).
I won the scholarship in Physics for academic achievements and maintaned it for the three years of undergraduate studies. The evaluation of the candidates was based on writing and oral examination. In order to maintain the right to the scholarship students had to sit all the exams set for each year within the following 31st October and to obtain an *average mark of at least 27/30* for the exams sat in the academic year and *no less than 24/30* in any one exam.

Pubblications

2003 W. Boschin, D. Ganzini, *A. Candolini*, G. Candolini, **Radio Observations of the 2002 December Ursids from North-Eastern Italy**, WGN, **31**:1 29–30 (2003)

Languages

Primary Language **Italian**

Secondary Language **English (level B2 advanced)** *2006, University of Cambridge First Certificate (F.C.E.)*

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Computer science skills

OS	Linux, MacOS, Windows
Programming Languages	Knowledge of C++, Android, Python, C, FORTRAN 90. Experiences with D, Java, Shell BASH, HTML
Protocols	XML, JSON
Database	SQL, JQL
IDE and editors	VI (I'm a proud VI fan), Sublime Text Editor, Eclipse, Android Studio
Typesetting	LaTeX 2_ε
Tools for software development and testing	Atlassian Inc. JIRA, Asana, Atlassian Confluence, Atlassian TestLodge, CVS, command-line git, GitHub, BitBucket, SourceTree, Asana
Programming environments	Mathematica, Octave/MATLAB
Scienfic libraries and tools	Cern ROOT framework, gnuplot, Asymptote Vector Graphics Language, METAPOST, GNU Scientific Library, fftw3, HDF5

Scientific Interests

- Quantum and Statistical Field Theory
- Topological Quantum Computing and Anyons
- Statistical data analysis and big data
- Object-oriented high-performance scientific computing
- D programming language

Hobbies

- Molecular cocktails, modern mixology, bartendering and gin
- Listening to blues and progressive rock (expecially Eric Clapton, Joe Bonamassa, Mark Knopfler, Eric Johnson, Deep purple)
- Reading books (I'm a proud fan of Dostoevskij)
- Typography (I love R. Bringhurst's *Elements of Typographic Style*)
- Walking with my Siamese cat Ciambella

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