

**Europass Curriculum Vitae** 

Personal information First name(s) / Surname(s)

# Andrea Giudici, PhD

TARTU MNT. 28/33 TALLINN, ESTONIA Address(es) (+372) 583 90544

Telephone(s) Fax(es) E-mail Nationality Date of birth

judge@area51staff.it - Personal website / things I've done: http://www.area51staff.it Italian

29th March 1985

Gender Male

# Software development / Research / Engineering

#### December 2014- Current Dates

Software Engineer, General Manager

Occupation or position held Main activities and responsibilities

**Occupational field** 

Name and address of employer Type of business or sector

Dates

Occupation or position held Main activities and responsibilities

Name and address of employer Type of business or sector

## Dates

**Development Team Lead** 

February 2011- August 2013

Occupation or position held Main activities and responsibilities

Team Lead within a project to develop a geo-localized SMS-based advertisement system. The system is based onto the Ericsson MPS with Trigger Interface, implemented in partnership with the biggest telco provider in Estonia, EMT. The project is the Estonian Innovation Innovation Award winning startup Flipper, based in Tallinn. The system is actively developed and maintained and offers its services to brands such as Apple, Skoda, Microsoft, McDonald's, Nike, and countless large local businesses.

Name and address of employer Flipper Estonia, Gullwing Oü.

Type of business or sector Software development

#### Dates January 2014- Current

Researcher Occupation or position held



Self-founded software development company in Tallinn. The main focus is on development of web and mobile applications, automation and computer vision. The company is profitable since the first year of operations. Recursive Software Development OÜ – http://www.recursive.ee

Maintenance of internal server and server applications. Development of internal software for shared use. Maintenance of industrial grade and custom-build measurement devices, and of gps-tracking

drifters employed within project MTT63-MTT, "Numerical particle tracking modeling for

inhomogeneous turbulent water basins" at Tallinn University of Technology.

Küberneetika Maja, Akadeemia Tee 21, Tallinn Estonia

Software Development, Automation

## September 2013- January 2015

Software Engineer

Engineering

Main activities and responsibilities

Name and address of employer Type of business or sector Field of Marine Engineering. Main current focus on development of control software for wagegenerating basin. The basin uses 8 hinged-type paddles connected to servo motors to replicate in a body of water (30m x 5m x 2m) different sea conditions.

Development and design of web applications. A portable, plugin-based CMS solution was developed and sold under license. Frameworks of choice are PHP Symfony2, Python Django and Play! For Java.

Private lecturer in Mathematics, Physics and Programming. Usual weekly schedule of 4 lectures of 2

Tallinn University of Technology, Department of Cybernetics

Mway Communication & Events S.r.I. di Mattia Righello

Research, Development

#### Dates January 2010- December 2014

Software Developer

Software development

Occupation or position held Main activities and responsibilities

Name and address of employer Type of business or sector

#### September 2009-December 2010

hours each, to small groups of 2-10 persons.

Occupation or position held Main activities and responsibilities Name and address of employer Type of business or sector

Technician Development of web based tools for backend management. Mway Communication & Events Support S.r.I. di Mattia Righello Software development

#### Dates August 2009-December 2010

School

Private teacher

Dates

Occupation or position held Main activities and responsibilities

Name and address of employer Type of business or sector

## **Education and training**

Title of qualification awarded

Principal subjects/occupational skills

# Dates

covered

#### January 2011-January 2015

Various - Private individuals

PhD, Civil Engineering

Thesis successfully defended on the 27<sup>th</sup> of January, 2015. Opponents: Steven R. Bishop, University College of London, Prof. Dr. Kristofer Döös, Stockholm University. Research study on Compressibility of the surface currents created by nonlinear waves. My research goal focuses on the restoration of the link between the source and impact areas of pollution in marine environment using the analysis of Lagrangian trajectories of current-driven pollution transport. The aim is to systematically characterize and visualize the pathways of pollution propagation from and the damaging potential of the offshore areas of the possible release of adverse impacts in terms of their transport to vulnerable regions, with the central goal to identify the areas, propagation of adverse impacts from which to high-value areas is most unlikely. Please refer to the list of publications at the end of this document.

Name and type of organisation providing education and training Level in national or international classification

Tallinn University of Technology

Doctoral Level

#### Dates September 2011

Principal subjects/occupational skills covered

Name and type of organisation providing education and training

Level in national or international classification

International Summer School on Preventive methods for coastal protection

BONUS BalticWay Consortium and Geophysical Sciences Department, Klaipeda University

Training school for Doctoral students

Dates	September 2008-September 2010									
Title of qualification awarded	MsC, Computer Science, 110/110 Cum Laude.									
Principal subjects/occupational skills covered	Final thesis titled "3D Visualization of large terascale datasets". Object of the thesis was to build an interactive 3D multi-screen device capable of offering a real-time access to very large amounts of data, such as metereological data for marine areas, molecular structures and dense vector fields. The device was chosen for a demonstration to the German Ambassador of Estonia during a visit at the Tallinn Institute of Technology.									
Name and type of organisation	Universitá degli Studi di Genova									
Level in national or international classification	Mas	Master of Science								
Dates	September 2005-September 2008									
Title of qualification awarded	Bachelor's Degree in Computer Science, 110/110									
Principal subjects/occupational skills covered	Deve impai	Development, as final project, of a device for chromatic recognition, oriented to users with visual impairments.								
Name and type of organisation providing education and training	Univ	Universitá degli Studi di Genova								
Level in national or international classification	Bac	Bachelor's of Science								
Personal skills and competences										
Mother tongue(s)	Italian									
Other language(s)										
Self-assessment		Understanding Speaking Writing						Writing		
European level (*)		Listening		Reading	S	poken interaction	S	poken production		
English		C2		C2		C2		C2	C2	
French	(*)	B2		C2		A2		A2	B1	
	(") <u>A</u>	<u>1-AZ:</u> Basic speake	er. Bi	I-B2: Independent	spe	aker. C1-C2:Profic	ient	speaker		
Social skills and competences	Goo Goo	Good skills in interpersonal relations, communication, listening, collaboration and problem solving. Good dialectic and emphatic capabilities.								
Organisational skills and competences	Goo diffe	Good skills in goal oriented projects, team work, management of time-sensitive tasks, coordination of different roles and figures involved in a project.								
Known programming languages	<ul> <li>Python w/ Django, Django CMS, Pyramid, Flask.</li> <li>Java / C# w/ Spring, Camel, Play!</li> <li>PHP w/ Symfony2.</li> <li>HTML5 / CSS3 / JS. Experience with broad range of frameworks</li> <li>C and embedded micro compilers.</li> <li>Bash</li> <li>SQL like languages</li> <li>MATLAB / Mathematica</li> </ul>									
Technical skills and competences	Software development, problem-solving, algorithm development, structure analysis, relational databases (MySQL, SQLite, PostgreSQL), editing technical documents, writing documentation, process optimization. Good experience in 3D programming and advanced 3D visualization techniques over different frameworks. Knowledge and skills in applied digital electronics. Good skills in mathematics. Working experience with industrial microcontrollers and development platforms (PIC, Atmel, Arduino, ARM, Z80). Knowledge of signal analysis theory.									
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Driving licence	European Driving License A and B					
Other general information	I am a self-taught piano player, and I love sports in general. I'm an avid alpine skier and I have experience teaching sailing. My non-CS interests are quite broad and they range from aviation in general, to flight simulation, r/c models, electronics, light fixture operation, kayaking, air-soft.					
Scientific publications	Giudici A., Soomere T. 2014. Finite-time compressibility as an agent of frequent spontaneous patch formation in the surface layer: a case study for the Gulf of Finland, the Baltic Sea. Marine Pollution Bulletin, doi: 10.1016/j.marpolbul.2014.09.053					
	Giudici, Andrea; Soomere, Tarmo (2013). In search for the areas of natural patch generation in the Gulf of Finland. In: BSSC 9th Baltic Sea Science Congress 2013 : New Horizons for Baltic Sea Science, 26-30 August, 2013, Klaipeda, Lithuania, Abstract Book: Klaipeda: Coastal Research and Planning Institute of Klaipeda University (KU CORPI), 2013, 40.					
	Giudici, Andrea; Soomere, Tarmo (2014). Highly persisting patch formation areas in the Gulf of Finland, the Baltic Sea. In: 2nd International Conference on Climate Change - The environmental and socio-economic response in the Southern Baltic region : Szczecin, Poland, 12-15 May 2014, Conference Proceedings: (Toim.) Witkowski, Andrzej; Harif, Jan; Reckermann, Marcus. Geesthacht, Germany: Helmholtz-Zentrum Geesthacht, 2014, (International Baltic Earth Secretariat Publication; 2), 84 - 85.					
	Giudici, Andrea; Soomere, Tarmo (2014). Measuring finite time compressibility from large simulated datasets: towards identification of areas of spontaneous patch formation in the Gulf of Finland. In: Databases and Information Systems : Proceedings of the 11th International Baltic Conference, Bal DB&IS 2014, [8-11 June, Tallinn, Estonia]: (Toim.) Haav, Hele-Mai; Kalja, Ahto; Robal, Tarmo. Tall Tallinn University of Technology Press, 2014, 441 - 446.					
	Giudici, Andrea; Soomere, Tarmo (2013). Identification of areas of frequent patch formation from velocity fields. Journal of Coastal Research, SI 65, vol. 1, 231 - 236.					
	Kalda, Jaan; Soomere, Tarmo; Giudici, Andrea (2013). On the finite-time compressibility of the surface currents in the Gulf of Finland, the Baltic Sea. Journal of Marine Systems					
	Giudici, A.; Soomere, T. (2013). Identification of coastal areas of frequent patch formation from velocity fields. In: ICS2013 International Coastal Symposium 2013 : Book of Abstracts, Plymouth University, 8-12 April 2013: (Eds.)Russell, P.E.; Masselink, G., CERF, 2013, 105.					
	Giudici, A.; Kalda, J.; Soomere, T. (2012). On the compressibility of surface currents in the Gulf of Finland, the Baltic Sea. In: IEEE/OES Baltic 2012 International Symposium : May 8-11, 2012, Klaipeda, Lithuania, Proceedings: IEEE, 2012, [1 - 8].					
	Giudici, A.; Kalda, J.; Soomere, T. (2012). On the compressibility of surface currents in the Gulf of Finland, the Baltic Sea. In: 2012 IEEE/OES Baltic International Symposium "Ocean : Past, Present and Future.Climate Change Research, Ocean Observation & Advances Technologies for Regional Sustainability" : Klaipeda, Lithuania, May 8-11, 2012, Presentation Abstracts: Klaipeda: Baltic Valley, 2012, 54.					
	Giudici, Andrea; Kalda, Jaan (2011). Compressibility of sea surface created by 3D current field. In: 8th Baltic Sea Science Congress [BSSC] : 22-26, August 2011, St.Petersburg, Russia : Book of Abstract: St. Petersburg: RSHU, 2011, 57.					