Curriculum Vitae
Adriano Gualandi

Fellowships and Scholarships	
2017	NASA Postdoctoral Program (NPP) fellowship
2012	Istituto Nazionale di Geofisica e Vulcanologia (INGV) PhD fellowship
2011	Marco Polo scholarship, University of Bologna

Post-doctoral jobs	
2017 Sep – 2019 Sep	NPP fellowship, Jet Propulsion Laboratory (JPL), Pasadena, CA, USA. Mentor: Dr. Zhen Liu
2015 Sep – 2017 Sep	California Institute of Technology (Caltech), Pasadena, CA, USA. Mentor: Prof. Jean-Philippe Avouac.

Academic Preparation	
2012-2015	PhD in Geophysics at University of Bologna and INGV, Italy. Thesis title: Spatial and temporal characterisation of ground deformation recorded by geodetic techniques Defense: 30th of April, 2015 Link to the thesis: http://amsdottorato.unibo.it/7093/1/Gualandi_Adriano_tesi.pdf Advisor: Prof. M.E. Belardinelli, University of Bologna, Dipartimento di Fisica e Astronomia (DIFA).
2009-2011	Master degree in Physics, curriculum Geophysics, at University of Bologna. Thesis title: Post-seismic evolution of seismogenetic structures after the April, 6 2009 L'Aquila earthquake. Vote: 110/110 cum Laude. Defense: 16th of December, 2011. Advisor: Prof. M.E. Belardinelli, University of Bologna - DIFA Co-advisor: Dr. E. Serpelloni, INGV
2006-2009	Bachelor degree in Physics at University of Bologna. Thesis title: Analisi di serie temporali di dati GPS (Analysis of GPS time series data). Vote: 110/110 cum Laude. Defense: 16th of October, 2009. Advisor: Prof. P. Baldi, University of Bologna - DIFA Co-advisor: Dr. E. Serpelloni, INGV
2001-2006	High school diploma at Liceo Scientifico Augusto Righi (Bologna), curriculum Piano Nazionale Informatica (PNI). Vote: 100/100.

Teaching Experience	
2016	Master degree co-advisor for the University of Bologna. Student: Cristina Nichele. Thesis title: Independent Component Analysis of GPS Time Series in the Altotiberina Fault Region in the Northern Apennines (Italy)

2014	Taught the short course on "The use of Principal Component Analysis and Singular Values Decomposition" to researchers involved in the research project DPC-INGV-S3 devoted to the "Short term prediction and preparation of earthquakes"

Professional Experience, Meetings, Schools, and Workshops

Reviewer for:	Earth and Planetary Science Letters, Journal of Geophysical Research, Journal of Geodesy, Tectonophysics, Sensors, Journal on Advances in Signal Processing, Advances in Space Research, Frontiers of Earth Science
2015 Sep – today	Maintainer of the Principal Component Analysis-based Inversion Method code (http://www.tectonics.caltech.edu/resources/pcaim/)
2018 Apr 8th-13th	Convener of the session "Transients detection and modeling in geophysical time series" at the EGU 2018 General Assembly. Poster presented at the EGU 2018 General Assembly. Title: Slow Slip Events in Cascadia: evidence of chaotic behavior from geodetic position time series
2017 Dec 11th-15th	Co-convener of the session "Geodetic Imaging and Interpretation of the Seismic Cycle" at the AGU 2017 Fall Meeting. Poster presented at the AGU 2017 Fall Meeting. Title: Aseismic Deformation Associated with an Earthquake Swarm in the Northern Apennines (Italy)
2016 Dec 12th-16th	Co-convener of the session "Time-dependent deformation in geodetic data: advances in detection, modeling and interpretation" at the AGU 2016 Fall Meeting. Poster presented at the AGU 2016, Fall Meeting. Title: Pre- and post-seismic deformation related to the 2015, Mw 7.8 Gorkha earthquake, Nepal
2015 Apr 13th – 18th	PICO presentation at the EGU 2015 General Assembly. Title: Characterization of Ground Displacement Sources from Variational Bayesian Independent Component Analysis of Space Geodetic Time Series
2015 Mar 31st	Invited seminar at Institute de Physique du Globe de Paris (IPGP). Title: Variational Bayesian Independent Component Analysis applied to geodetic time series
2015 Feb-Apr	Study of displacement geodetic (GPS and InSAR) time-series with multivariate statistical analysis under an independent contract agreement with INGV and the Civil Protection Department (DPC) for the project S3 devoted to the "Short term prediction and preparation of earthquakes". Coordinator of the project: Prof. Dario Albarello (Univ. of Siena)
2014 Dec 15th – 19th	Poster presented at the AGU 2014 Fall Meeting. Title: Detection and Characterization of Ground Displacement Sources from Variational Bayesian Independent Component Analysis of GPS Time Series

2014 Nov 3rd – 11th	Attended the school entitled "EARTHQUAKES: nucleation, triggering, and interactions with aseismic processes" hold in Cargèse (Corsica, FR). Helped Dr. Hugo Perfettini in holding the tutorial entitled "Derivation of the coupling map in the area of the Tohoku-Oki earthquake" using the Principal Component Analysis-based Inversion Method (PCAIM) software.
2014 Oct 14th – 15th	Presentation at the workshop TABOO (The AltotiBerina near fault Observatory) in San Faustino, Pietralunga (PG, Italy). Title: Variational Bayesian approach for the analysis of independent components applied to space geodetic time- series: simulations and potential applications for time- dependent deformation studies.
2013 Jul – 2014 Feb 2011 May-Aug	Visiting Student at Tectonic Observatory (TO) laboratories, Caltech. Supervisor: Prof. Jean-Philippe Avouac
2013 Oct 15th	Poster presented at the Tenth TO meeting, Caltech. Title: Space-Time Evolution of Crustal Deformation from GPS Data: Principal Component Analysis (PCA), Independent Component Analysis (ICA) and the L'Aquila Earthquake (central Italy)
2012 Dec	Poster presented at AGU 2012 Fall Meeting. Title: Space-time evolution of crustal deformation related to the M_w 6.3, 2009 L'Aquila earthquake (central Italy) from Principal Component Analysis Inversion of GPS position time-series.
2012 Sep 10th – 14th	Pialli 2012 Structural Geology School, University of Perugia – Tectonic-Geodesy short course: The modern geodesy for the modern earth scientists – Prof. Bennett Richard Anthony (University of Arizona)
2012 Apr	Poster presented at EGU 2012 General Assembly. Title: Spatio-temporal evolution of Postseismic Afterslip following the M_w 6.3, 2009 L'Aquila Earthquake (central Italy) from Principal Component Analysis Inversion of GPS position time series.

Publications	https://scholar.google.com/citations?user=3yEKqVoAAAAJ&hl=it&oi=ao
2018	Serpelloni E., F. Pintori, A. Gualandi, E. Scoccimarro, A. Cavaliere, L. Anderlini, M.E. Belardinelli and M. Todesco, Hydrologically-induced karst deformation: insights from GPS measurements in the Adria-Eurasia plate boundary zone, *JGR accepted*
	Nespoli M., M.E. Belardinelli, A. Gualandi, E. Serpelloni and M. Bonafede, Poro-elasticity and fluids flow modeling for the 2012 Emilia Romagna earthquakes: hints from GPS and InSAR data, *submitted to Geofluids*.
	Larochelle S., A. Gualandi, K. Chanard and J.-P. Avouac, Extraction and Modeling of Geodetic Strain Due to Surface Load Variations in the Himalaya, *in prep.*
	Smith J.D., R. White, J.-P. Avouac, A. Copley and A. Gualandi, Deformation and Seismicity of the Groningen Region, Netherlands, *in prep.*

	Michel S., A. Gualandi and J.-P. Avouac, Constraints on Seismic and Aseismic Slip on the Cascadia Megathrust from geodesy and seismicity, *in prep.*
	Zhang Z., A. Gualandi, C. Rollins, J.-L. Zhang and J.-P. Avouac, Frictional properties on the Main Himalayan Thrust, *in prep.*
	C. Rollins, A. Gualandi, J.-P. Avouac, Z. Zhang and J.-L. Zhang, Postseismic deformation following the 2015 Mw=7.8 Gorkha earthquake: implications for the rheology of the Tibetan crust, *in prep.*
	Gualandi A., S. Michel and J.-P. Avouac, Slow Slip Events in Cascadia: evidence of chaotic behavior from geodetic position time series, *in prep.*
	Gualandi A. and Z. Liu, Afterslip and viscoelatic characterization after the El Mayor-Cucapah Mw7.2 earthquake, *in prep.*
2017	Gualandi A., C. Nichele, E. Serpelloni, L. Chiaraluce, L. Anderlini, D. Latorre, M. E. Belardinelli, and J.-P. Avouac (2017), Aseismic deformation associated with an earthquake swarm in the northern Apennines (Italy), *Geophys. Res. Lett.*, *44*, doi:10.1002/2017GL073687.
	Pirouz M., J.P. Avouac, A. Gualandi, J. Hassanzadeh, and P. Sternai. Flexural bending of the Zagros Foreland basin, *Geophys. J. Int.*, doi: 10.1093/gji/ggx252.
	Gualandi A., H. Perfettini, M. Radiguet, N. Cotte, and V. Kostoglodov (2017), GPS deformation related to the M w 7.3, 2014, Papanoa earthquake (Mexico) reveals the aseismic behavior of the Guerrero seismic gap, *Geophys. Res. Lett.*, *44*, doi:10.1002/2017GL072913.
2016	Radiguet M., H. Perfettini, N. Cotte, A. Gualandi, B. Valette, V. Kostoglodov, T. Lhomme, A. Walpersdorf, E. Cabral Cano and M. Campillo, Triggering of the 2014 Mw7.3 Papanoa earthquake by a slow slip event in Guerrero, Mexico, *Nature Geoscience*, doi:10.1038/ngeo2817.
	Gualandi A., J.-P. Avouac, J. Galetzka, J.F. Genrich, G. Blewitt, L.B. Adhikari, B.P. Koirala, R. Gupta, B.N. Upreti, B. Pratt-Sitaula and J. Liu-Zeng, Pre- and post-seismic deformation related to the 2015, Mw 7.8 Gorkha earthquake, Nepal, *Tectonophysics*, doi:10.1016/j.tecto.2016.06.014.
	Gualandi A., E. Serpelloni and M.E. Belardinelli, Blind Source Separation problem in GPS time series, *J. Geod.*, DOI 10.1007/s00190-015-0875-4.
2015	Nespoli M., M. Todesco, E. Serpelloni, M.E. Belardinelli, M. Bonafede, M. Marcaccio, A.P. Rinaldi, L. Anderlini and A. Gualandi, Modeling earthquake effects on groundwater levels: evidences from the 2012 Emilia earthquake (Italy), *Geofluids*, doi: 10.1111/gfl.12165.
2014	Gualandi A., E. Serpelloni and M.E. Belardinelli, Space-time evolution of crustal deformation related to the M w 6.3, 2009 L'Aquila earthquake (central Italy) from Principal Component Analysis Inversion of GPS position time-series, *Geophys. J. Int.*, doi: 10.1093/gji/ggt522

Personal Skills	
Mother tongue	Italian
Other languages	English (fluent)
Communication skills	Good communication skills gained through my experience as a seller in trade shows and teaching martial arts.
Computer skills	Very good programming skills in Matlab, and basic level in Scilab, Python, bash, and C-shell. Good knowledge of Unix environment (Ubuntu, Mint, Fedora).
Driving license	Motorcycle (Italian and American driving license) Car (Italian and American driving license) Boat (Italian sail boat license)