





Personal information

Surname(s) / First name(s) Address(es)

Telephone(s)

Email(s)

Nationality(-ies)

Date of birth

Gender

Research and Professional activities

Nov 2018-Ongoing

Main research field

September 2018-Ongoing

Main project

Main activities

March 2018-September 2018

Main project

Main activities

Fortunato Marco

PhD student at the Geodesy and Geomatics Division of "Sapienza" University of Rome

GNSS variometry, GNSS real-time navigation, GNSS algorithms, **GNSS POWER**, Android Raw Measurements

Research Engineer at Nottingham Scientific Ltd (GMV NSL)

FLAMINGO: Fulfilling enhanced Location Accuracy in the Mass-market through Initial Galileo Services (www.flamingognss.com)

Development of GNSS algorithms dealing with Android GNSS measurements and low-cost GNSS receivers. Development of GNSS/IMU coupling algorithms

Graduate Engineer at Nottingham Scientific Ltd (GMV NSL)

FLAMINGO: Fulfilling enhanced Location Accuracy in the Mass-market through Initial Galileo Services (www.flamingognss.com)

Improving location accuracy with Android GNSS receivers using RTK and PPP algorithms, preparation of technical reports for Partners and European GNSS Agency (GSA)

Education and training

Nov 2015–Jan 2018 Final Grade

Master Thesis

Master's Degree in Environmental Engineering 110/110 summa cum laude

GNSS Atmosphere Smart Modeling in Local Dense Networks with Low Cost Hardware and Free and Open Source Software Supervisor: Prof. Mattia Crespi

Major: Geodesy and Geomatics

Exams

Geographic Information Systems and Geomatics, Hydraulic Structures for the Environment and the Soil Protection, Environmental and Maritime Hydraulics, Applied Hydrogeology, Environmental Economics, Urban Planning, Rock Mechanics, Construction Techniques, Costal Engineering, Hydraulic Protection for the Territory and the Coast, Sampling and Physical Treatment of Contaminated Soils, Geotechnics, Geophysics for Soil Protection

Institute

Sapienza University of Rome, Rome (Italy)

Oct 2012-Nov 2015 Final Grade **Bachelor's Degree in Environmental Engineering** 110/110 summa cum laude

Thesis

Close-Range Photogrammetry for Reconstruction of Morphologies in Glaciological Field: Application to the Front of Forni Glacier

Supervisor: Prof. Mattia Crespi

Major: Geodesy and Geomatics

Main Exams

Applied Geology, Structural Mechanics, Numerical Analysis and Computer Programming, Fluid Mechanics, Energy Systems, Sustainable Environmental Development, Sanitary and Environmental Engineering, Raw Materials Engineering, Geotechnics Fundamentals, Ecology and Pollution Phenomena of Natural Environment, Positioning, Environmental Geotechnics, Applied Hydrology and Hydrosystems Engineering Fundamentals, Fundamentals of CAD and GIS

Institute

Sapienza University of Rome, Rome (Italy)

Sep 2007-Jul 2012 Final Grade **Diploma Liceo Scientifico** 98/100

Institute

Liceo Scientifico Statale, Potenza (Italy)

Awards

June 2019

Young Authors Awars 2019 from SIFET (Italian Society of Photogrammetry and Topography)

February 2019

Best M.Sc. Thesis in the contest GRS29-CNI 2018. The contest, organized from the Chapter Central-North Italy (CNI) of IEEE Geoscience and Remote Sensing Society (GRSS) for the best M.Sc. Thesis in the field of Geoscience and Remote Sensing

April 2018

Sapienza Excellent Student Award for the Academic Year 2016-2017

Jan 2018

Participation at the Excellence Course for graduate students with an outstanding curriculum distinguished for the academic achievement in Environmental Engineering for the Academic Year 2016/2017

Publications

Paziewski, J.; Fortunato, M.; Mazzoni, A.; Odolinski, R.; An analysis of multi-GNSS observations tracked by recent Android smartphones and smartphone-only relative positioning results; MEASUREMENT. - ISSN 0263-2241. - 175(2021)

Fortunato, M.; Mazzoni, A.; Berrino, G.; Greco, F.; Riguzzi, F.; Sonnessa, A.;Indoor height determination of the new absolute gravimetric station of L'Aquila;ANNALS OF GEOPHYSICS. - ISSN 1593-5213. - 63:Vol 63 (2020)(2020), pp. 1-24

L. Massarweh, **M. Fortunato** and C. Gioia, Assessment of Real-time Multipath Detection with Android Raw GNSS Measurements by Using a Xiaomi Mi 8 Smartphone, 2020 IEEE/ION Position, Location and Navigation Symposium (PLANS), Portland, OR, USA, 2020, pp. 1111-1122, doi: 10.1109/PLANS46316.2020.9110169

Fortunato, M.; Ravanelli, M.; Mazzoni, A. Real-Time Geophysical Applications with Android GNSS Raw Measurements. *Remote Sens.* 2019, 11, 2113

Mascitelli, A., Federico, S., **Fortunato, M.**, Avolio, E., Torcasio, R.C., Realini, E., Mazzoni, A., Transerici, C., Crespi, M. and Dietrich, S., Data assimilation of GPS-ZTD into the RAMS model through 3D-Var: preliminary results at the regional scale. *Measurement Science and Technology*, 2019, 30(5), p.055801

M. Fortunato, J. Critchley-Marrows, M. Siutkowska, M. L. Ivanovici, E. Benedetti and W. Roberts, Enabling High Accuracy Dynamic Applications in Urban Environments Using PPP and RTK on Android Multi-Frequency and Multi-GNSS Smartphones, *2019 European Navigation Conference (ENC)*, Warsaw, Poland, 2019, pp. 1-9

Roberts, William, Critchley-Marrows, Joshua, **Fortunato, Marco**, Ivanovici, Maria, Callewaert, Karel, Tavares, Thiago, Arzel, Laurent, Pomies, Axelle, FLAMINGO - Fulfilling Enhanced Location Accuracy in the Mass-market through Initial Galileo Services, *Proceedings of the 31st International Technical Meeting of the Satellite Division of The Institute of Navigation (ION GNSS+ 2018)*, Miami, Florida, September 2018, pp. 489-502

Professional Qualification

Oct 2018

Passed the qualification exam and licensed as a professional engineer

Personal skills and competences

Mother tongue(s)
Other language(s)
Self-assessment
European level(*)

English

Communication skills

Organisational skills and

Computer skills and competence

competences

Italian

English

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
B2	B2	B2	B2	B2

^(*) Common European Framework of Reference (CEF) level

Good communication skills acquired during the university period and, in particular, during the experience as council member of the M.Sc Course in Environmental Engineering and of the Faculty of Civil and Industrial Engineering. Good team spirit gained both for participation in various university projects and for participation in team sports.

Good organizational and managerial skills acquired during waiter experiences and during the university period.

Knowledge of the following programming languages: Python, Latex, C/C++

Knowledge of the following software: RTKLIB, Microsoft Office, Agisoft PhotoScan, Global Mapper, ArcGIS, QuantumGIS