

Giuseppe Patanè - Curriculum Vitae

PERSONAL DATA

Date of Birth & Nationality
Contact
EU expert ID

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EX2002B075924

WORKING EXPERIENCE

Dates	From March 2, 2020, to present
Name and address of employer	CNR - Italian National Research Council, IMATI Institute of Applied Mathematics and Information Technologies, Genova, Italy
Type of business or sector	Research & Development
Occupation or position held	Senior Researcher
Main activities and responsibilities	Responsible for the research line "Numerical Geometry and Signal Processing".
Dates	From January 2, 2006, to March 1, 2020
Name and address of employer	CNR-IMATI
Type of business or sector	Research & Development
Occupation or position held	Researcher
Dates	From January 2, 2001, to January 1, 2006
Name and address of employer	CNR-IMATI
Type of business or sector	Research & Development
Occupation or position held	Researcher Fellow
ERC Sectors	<p>Primary ERC Sector: PE6 Computer science and informatics - PE6.8 Computer graphics, computer vision, multimedia, computer games; PE6.9 Human computer interaction and interface; PE6.12 Scientific computing, simulation and modelling tools.</p> <p>Secondary ERC Sector: PE7 Systems and communication engineering: electronic, communication, optical and systems engineering: PE7.4 Simulation engineering and modelling, PE7.8 Signal processing, PE7.10 Man-machine-interfaces.</p> <p>Secondary ERC Sector: PE1 Mathematical foundations - PE1.16 Mathematical aspects of computer science; PE1.17 Numerical analysis and scientific computing; PE1.20 Application of mathematics in sciences; PE1.21 Application of mathematics in industry and society.</p>

EDUCATION & TRAINING

Dates	January 2002 - April 2005
Education & training organisation	University of Genova, Italy
Subjects/occupational skills covered	Applied Mathematics, Computer Science
Title of qualification awarded	Ph.D. in Mathematics
Dates	January 2000 - December 2000
Education & training organisation	Institute for Advanced Mathematics "F. Severi", University of Milano Bicocca
Subjects/occupational skills covered	Applied Mathematics, Computer Science
Title of qualification awarded	Advanced Post-Lauream Degree in "Mathematics' Applications to Industry"
Dates	January 1994 - July 1999

Education & training organisation	University of Genova, Italy
Subjects/occupational skills covered	Applied Mathematics, Computer Science
Title of qualification awarded	Master of Science in Mathematics

SCIENTIFIC HABILITATION

2027-2018	Full Professor, Scientific Sector 01/B1 - INF01 - Computer Science.
2026-2017	Full Professor, Scientific Sector 09/H1 - Systems for Information Processing.

LANGUAGE SKILLS

Language Skills	Italian: mother tongue
	English: FIRST Certificate (B2), University of Cambridge, ESOL Examination.

RESEARCH COORDINATION

My **research interests** lie at the intersection of **Engineering**, for the aspects related to information systems, simulation engineering and modelling, signal processing, man-machine-interfaces, **Computer Science** for the aspects related to Computer Graphics, and **Applied Mathematics** for the aspects related to simulation. The results of my activities have been applied to i) the fusion, segmentation, analysis, and segmentation of heterogeneous data and ii) the study and development of methods, algorithms, and services for modelling, integrating, and analysing large, heterogeneous geo-spatial data, and for monitoring critical events, such as rain falls and landslides. To this end, innovative algorithms have been proposed for the computation of multi-resolution and feature-preserving representations of large 3D terrain models and for the approximation of heterogeneous data (e.g., time-varying rainfall field and radar data over 3D terrains models). Under my supervision, these activities are involving, or involved,

- 5 post-doctoral research fellowships and 2 research fellowships;
- 4 Ph.D. students in Computer Science at the Department of Computer Science, Bioengineering, Robotics and Systems Engineering of the University of Genova;
- 1 Post-Lauream Master degree students from the University of Rome and 1 Bachelor student from the University of Genova; 5 Master students at the Department of Computer Science, Bioengineering, Robotics and Systems Engineering and at the Department of Mathematics of the University of Genova.

PROJECTS

2021-2016	H2020 EU ERC - Advanced Grant - "CHANGE - New challenges for (adaptive) PDE solvers: the interplay of analysis and geometry". Duration: 5 Years. Participant.
2018-today	CNR Project "Data, Content, and Media". Duration: 48 months. Funding Institution: CNR. Duration: 4 Years. Scientific Coordinator.
2016-2015	FP7 European Integrated Project IQumulus - "A High-volume Fusion and Analysis Platform for Geospatial Point Clouds, Coverages and Volumetric Data Sets". Duration: 4 Years. (Leader of WorkPackage 4 - "Processing services" and Leader of Task 4.1 - "Guidelines for data integration and processing").
2010-2008	FP7 EU Coordinating Action FOCUS-K3D - "Foster the comprehension adaptation and use of the knowledge intensive technologies for coding and sharing 3D media content in consolidated and emerging application communities". Duration: 3 years. Participant.
2008-2006	FP6 EU European Project ENV4-CT98 0753 "Telematics for environment CEO PLAINS - prototype landscape assessment information system" (1998-2001). Duration: 1 year. Participant.

PANELS' EXPERT

Table 1: Main roles as Principal Investigator and Co-Investigation of National and European Research Projects.

Period	Project	Funding Agency	CNR-IMATI	Amount	Role
2020	Research Infrastructure	MUR/CNR	166.000€	1.450.000€	Responsible CNR-IMATI Node
2020-21 (1 year)	Project MISE	Competence Center	61.000€	490.799,98€	Principal Investigator CNR
2019-22 (2 years)	Project Regione Liguria	FESR	51.000€	51.000€	Principal Investigator
2019-22 (3 years)	Industrial Ph.D.	CNR & Esaote SpA	56.537€	56.537€	Principal Investigator
2015-17 (3 years)	Project FAR	MIUR	100.920€	2.399.999€	Principal Investigator CNR
2012-15 (2 years)	Project Regione Liguria	FESR	52.000€	52.000€	Principal Investigator
2014	Contract	CAMELOT Bio S.r.l.	5.000€	5.000€	Principal Investigator
2016-2018 (5 years)	CNR/MISE	CNR/MISE	9.000€	3.000€	Principal Investigator
2015, 2010	Contract	INdAM	1.600€	1.600€	Principal Investigator
Total funding as Principal Investigator:			503.057€		
2011-15 (4 years)	FP7 ITN MSH	European Commission	514.000€	3.561.930€	WP8 Leader
2012-16 (4 years)	FP IP IQmulus	European Commission	805.286€	10.922.000€	WP4 & Task 4.1 Leader

- **2019-2022 (3 Years) Member of the Scientific and Technical Committee of the MISE Competence Center START4.0** - Competence Center for the Security and Optimisation of Strategic Infrastructures.

EU REVIEWER

2020	Reviewer and Expert for monitoring H2020 European Projects Widespread ERA Chairs.
2020	Reviewer for Technology Agency of the Czech Republic.
2020	Reviewer for the European Science Foundation, University of Lille - PEARL Evaluation.
2019	Reviewer for Catalunya Research Funding Agency, <i>Agencia de Gestio d'Ajuts Universitaris i de Recerca Departament d'Empresa i Coneixement</i> , Catalunya, Spain.
2019	Reviewer for EEA Grants, <i>Executive Agency for Higher Education, Research, Development and Innovation Funding</i> , Bucharest, Romania.
2017	Reviewer of H2020 European Projects Widespread ERA Chairs.
2019, 2017, 2015, 2009	Reviewer of H2020 and FP7 FET Projects, Future & Emerging Technologies.
2015-2012	Reviewer of Horizon2020 and FP7 Marie Curie People Projects, Individual Fellowship.

SCIENTIFIC PUBLICATIONS

- Author and editor of 2 books.
- Editor of 1 journal special issue and 2 conference proceedings.
- Author of 46 journal papers, 15 book chapters, 32 conference papers.
- Organiser and speaker of 6 courses at ACM SIGGRAPH & SIGGRAPH ASIA, Eurographics, Shape Modelling.
- Google Scholar: <https://scholar.google.it/citations?user=17il2PMAAAAJ&hl=en>
- ORCID (ID 0000-0002-2276-9553): <http://orcid.org/0000-0002-2276-9553>

Genova, 11 April 2023

Dr. Giuseppe Patanè

Firmato digitalmente da
GIUSEPPE PATANÈ
O = Consiglio Nazionale delle Ricerche
Firmato il 13/04/2023 13:35
Seriale Certificato: 179228