UNIVERSITÀ TELEMATICA INTERNAZIONALE UNINETTUNO

SCHEDA BIOGRAFICA

Le informazioni contenute in questa scheda verranno pubblicate sul sito dell'Università Telematica UNINETTUNO

Corso di Laurea: INGEGNERIA INFORMATICA

Insegnamenti: Sistemi Informativi e Basi di Dati, Ingegneria del Software e Programmazione ad Oggetti, Progettazione del Software, Programmazione di Sistema.

Nome: Mauro

Cognome: Mazzei

e-mail: mauro.mazzei@uninettunouniversity.net

Curriculum (in italiano)

Curriculum (in inglese)

WORK EXPERIENCE	International indicators: https://www.cnr.it/people/mauro.mazzei https://orcid.org/0000-0001-7350-2237 https://scholar.google.it/citations?user=LOgLGukAAAAJ&hl=it https://www.scopus.com/authid/detail.uri?authorId=55348922900
2010-present	Consiglio Nazionale delle Ricerche (National Research Council), Institute of Systems Analysis and Computer Science (IASI)"Antonio Ruberti"
Job position	Staff research scientist
Research areas	ICT, Complexes Autonomous Systems and Spatial Analysis. Applied ICT: Geomatics, Geotechnical, Transportation, Remote Sensing, Environment and/or Cultural Heritage
Recent Scientific Activities	Analysis and modeling of domains that relates of Geographic

Information Science in the Open Source field, definitions of SDI (Spatial Data Infrastructure) and co-design architectures; Machine learning, FEA/FEM structural analysis, study and testing of Service Oriented Architecture (SOA) systems, Object Oriented Programming, Web Services; analysis and spatial planning through mathematical models of simulation of socio-economic evolution and urban and regional mobility.

- Machine learning, data science, big data analytics, neural network, CNN neural network convolution, modal analysis;
- Analysis, study and testing of systems, Service Oriented Architecture (SOA), Web Services ;
- Analysis and planning by mathematical simulation models of socio-economic development and urban and regional mobility;
- Analysis and definition of data clustering models and/or algorithms and remote sensing techniques;
- Analysis and definition of models and/or recognition algorithms in remote sensing techniques.

  - He is coordinator of the Research Laboratory of Geomatics and Information Systems of the CNR (LabGeoInf). The research and development activity of the Laboratory is classified into 3 thematic areas: Geomatics, Machine Learning, Computer Science, see: http://labgeoinf.iasi.cnr.it
  - He has been selected as expert in the Project Task Force 1,000 experts (Article 6 Decree of the Minister of Public Administration of October 14, 2021), UNDER THE PNRR, MEASURE 1, COMPONENT 1, SUBINVESTMENT 2.2.1 FINANCED BY THE EUROPEAN UNION - NEXTGENERATIONEU" CUP: B51B21006020006
  - He is part of the register Reprise experts of the Ministry of University and Research of Legislative Decree no. 297/1999 as an expert in the subject area Civil Engineering and Architecture (surveying and mapping) and Mathematical and Computer Sciences (Operations Research).
  - He received an advisory contract with the Presidency of the Council of Ministers - Department for Programming and Coordination of Economic Policy (DIPE) in the framework of the Strategic Project "Indicators for Urban Policies"
  - He is a member of the Department of Public Functions in the framework of the Operational Objective for Strengthening Operational Structures and Competences in Public Administration PON FESR
  - He is part of the working groups of the CINI National Artificial Intelligence laboratories.
  - He is part of the CNR Artificial Intelligence Working Group in Geoinformation.
  - He is part of the INDAM research working groups.
  - He is part of the expert group of the European programme

INSPIRE (Infrastructure for Spatial Information in Europe).
https://inspire.ec.europa.eu/experts/mauro-mazzei

Scientific Project Manager in the following projects:

- Principal Investigator: pOrtale per la conoscenza del Patrimonio culturalE e stoRico-Archeologico (OPERA) POR FESR Regione Lazio (2022-2023). Total amount: 279.410,85 euro. Unit: 27.722,00 euro
- Principal Investigator: Smart Urban Mobility Management (S.U.M.Ma.) MISE Program Network 5G (2020-2022). Total amount: 1.250.000,00 euro. Unit: 85.400,00 euro
- Principal Investigator: VINTERLAB 2021: Virtual an interactive LAB Sustainable Fruition of Cultural Asset. Unit: 12.000,00 euro
- Principal Investigator: SMARTDATA 2021-2023: Innovative solutions aimed at enriching data and services. Total amount: 210.000,00 euro.
- Principal Investigator: MARA European Funds H2020 project PON / MISE Smart Factory (2020-2022). Total amount: 1.577.832,00 euro. Unit: 182.700,00
- Partecipant at: PACIB project Platform for the acquisition, analysis and classification of biomedical images for the early diagnosis of neurodegenerative diseases (2018-2020). Total amount: 178.000,00 euro. Unit: 62.931,00 euro
- Principal Investigator: BEST (Bracelet Embeded Safety True , MISE "HORIZON2020" PON I&C 2014-2020). Total amount: 1.382.620,63 euro. Unit: 145.000,00 euro
- Principal Investigator: MUS&O (MUltisensory & hOlographic, MISE "HORIZON2020" PON I&C 2014-2020). Total amount: 1.712.510,00 euro. Unit: 516.180,00 euro
- Partecipant at Project EU: INSPIRE INnovative Services for fragile People in RomE – EASI 2014 - PROGRESS AXIS - 2015-2017. Total amount: 2.100,00 euro. Unit: 171.650,00 euro
- Partecipant at Project EU: R.A.F.F.A.E.L. - RedesigningActivities in a Family FriendlywAy in VitErbo'sworkpLace- 2018-2020. Total amount: 224.026,00 euro. Unit: 62.392,00 euro
- Principal Investigator: TECA (TEcnologia e CulturA, POR FESR Regione Campania – Project Cultural and Creative Lab, 2015-2016). Total amount: 715.763,00 euro. Unit: 143.421,00 euro
- Principal Investigator: Project DIRS (Device Infomobility Reference Station): Realization of a device by means of network infrastructure GPS / GNSS can geolocalize mobile devices with

extreme precision and integrate mobile information services for the safety and personal protective equipment (PON). Activity 20/02/2014 today. (N°CNR-IASI 92 20/02/2014). Total amount: 1.996.938,00 euro. Unit: 60.000,00 euro

- Scientific coordinator Systems Engineer in Geographic Information Systems Project Census Cartography for the Archaeological of Italy - Geographic Information System for Cultural Heritage (PON). 10/01/2010 – 10/02/2011.
- Partecipant at: OR 1-2 del Progetto H@H (Health@Home) – Smart Communities for the wellbeing of the citizens (PON Research). (MIUR D. D. 391/Ric del 5 luglio 2012 - N° MIUR SCN_00558). Total amount: 14.000.000,00 euro. Unit: 150.000,00 euro
- Scientific coordinator: CNR-IASI and PRF Projects for research on: analysis and planning by mathematical simulation models of socio-economic development and urban and regional mobility; analysis and planning of public transport systems and urban mobility. (N°CNR-IASI 386 - 11/09/2013)
- Principal Investigator: project for the construction of a photovoltaic system as an expert in renewable energy (N° CNR-IPCF 4301 - 03/07/2011)

Name and address of employer	CNR/IASI – Via dei Taurini, 19 – 00185 Roma
Sector	ICT, Operations Research, Analysis of Complex Systems
2016-present	at the International Telematic University Uninettuno - Faculty of Engineering
Job position	Professor/tutor

Activities — He works as a lecturer/tutor at the International Telematic University Uninettuno in the following degree courses:

Faculty of Engineering, specialization: Computer Science, Bachelor of Science, teachings:

– Information Systems and Databases ING-INF/05;
– Software Engineering and Object Oriented Programming ING-INF/05.

Faculty of Engineering, specialization in computer science, Master's degree course:

– Software Design ING-INF/05,
– System Programming ING-INF/05.

He has been supervisor and rapporteur of thesis, master thesis and PhD thesis.

Name and address of employer	Uninettuno University – Corso Vittorio Emanuele II, 39 00186 Roma - IT
Sector	Academic/research

2009-2010	at the National Research Council, Engineering Department - ICT and Technology for Energy and Transport
Job position	Research scientist
Activities	Business management and technical / scientific in the following projects: - Projects funds PON / ERDF coordination of scientific and technical activities. - Projects funds FIT / MISE coordination of scientific and technological activities. - Projects funds FP7 coordination of scientific and technological activities. - Management and organization of document flow of network-related scientific institutions belonging and participating in the ICT Department.
Name and address of employer	CNR – Piazzale Aldo Moro, 7 – 00185 Roma
Sector	ICT- Management
2000-2009	presso il Consiglio Nazionale delle Ricerche, Territorial Information Systems Office
Job position	Staff research scientist
Recent Scientific Activities	Research, technical / scientific and management in the following projects: − Manager for the technical knowledge aimed at SIT, cataloging and enhancement of the Italian cultural heritage. Experimentation with sensor mulispettrale MIVIS in collaboration with CNR institute / IIA - LARA Project (2003) − Research project on development of methodologies for cataloging of artistic and cultural interest in the South (2003). (N ° 433 of 13/12/2005 CNR-DG) − New technologies for the knowledge, study and management, including for employment and new businesses, of artistic and cultural heritage museum in the Province of Catania - Experimental Lidar (2004) − Experimental methods for the detection, diagnosis and management of the archaeological heritage of the area (2004). (N ° 433 of 13/12/2005 CNR-DG) − Regional Geographic Information System of the Campania Region (2000-2006 National Operational Programme "Security for the Development of Southern Italy") (2005). (N ° 433 of 13/12/2005 CNR-DG) − "Project Virtual Museum of Baghdad," participation in the study mission in Dhi Qar province (southern Iraq) as an expert detection techniques geotopografiche. DGPS surveys and acquisition of images to QTVR, reconnaissance territorial and evidence collection sites of Ur, Eridu, Obeid. (2006). (Protocol No. CNR-

Office of Corporate Research and Business Agency 18752 of 03/03/2006)

- Research program on "Methodologies for the dissemination network of the Catalogue of cartography and maps multidisciplinary environmental issues of the South" (2006)
- Assignment of supply test in dual-frequency L1/L2 DGPS stations - Directorate General CNR (2007). (CNR-UORAA Protocol No. 19 of 22/10/2005)
- Member of the evaluation committee as an expert cartographer of the National Research Council and a consultant for the project "Geographic Information System territorial Campania." (CNR-DRR/MIBAC Protocol N ° 472/473 of 24/01/2005)
- Assignment of teaching on the use of instrumentation data with DGPS surveys on behalf of the laboratory Topography of the Second University of Naples. (No. CNR-DRR 7/DG-U2 of 24/01/2005)
- Member of the testing application software with the task of expert advisor CNR within the project SIT PON Security Campania. (No. 2267 of the Protocol CNR-DRR/MIBAC 15/11/2004)
- Member of the Board of colaudo software application as a cartographer of the CNR in the framework of the project Campania SIT PON Security (2007). (No. 3016 of the Protocol CNR-DRR/MIBAC 13/12/2004)
- Member of the Committee on the evaluation of bids to tender for the supply HW / SW as an expert consultant in the field of CNR Project Campania SIT PON Security (2007). (N ° 1838 26/03/2003 CNR-DRR/MIBAC)
- Member of the Board of test instrumentation 3D Laser Scanner. (No. 386 CNR-DG/SASIT Protocol of 2006)
- Member of the commission of testing within the project 109 "Methods for the dissemination network in the catalog of cartography and maps multidisciplinary environmental issues of the South." (CNR-DG/SASIT Protocol N ° 382 of 2006)
- Report activities conducted at the National Research Council in 2000-2005. (N ° 433 of 13/12/2005 CNR-DG

Name and address of employer	CNR – Piazzale Aldo Moro, 7 – 00185 Roma
Sector	ICT applied to Geographic Information Systems

1991 - 2000	SystemCart s.r.l.
Job position	Technical Manager for the organization of projects and technical developments
Activity	– Design, implementation and development of geographic information systems; Realization on behalf of the Emilia Romagna Region of the first 50.000 maps derived from the National Geological Survey.
	– Realization of thematic cartography, spatial maps, remote sensing data analysis activities for the following organizations:
	FAO, Telespazio, Italian regions and municipalities.
Name and address of employer	SystemCart s.r.l. – Via Alessandro Cruto, 16
Sector	Remote Sensing, Cartography and Geographic Information Systems computerized
1985 - 1993	FAO - Food and Agriculture Organization - UN
Job position	Technical Manager with fixed-term contracts
Activity	Technical Manager for projects in thematic maps: - ECWA Region map 1:5,000,000 (Creation of thematic maps). - Climatic Map resorce inventory of Bangladesh 1:500,000 (Creation of thematic maps). - 18 resorce land inventory maps of Bangladesh 1:125.000 (Realization of thematic mapping using remote sensing interpretation). - 20 maps of coastal outline, water bodies, vegetation polygon, polygon numbering vegetation, countries of Africa 1:5,000,000 (Creation of thematic maps for inclusion in a Arc / Info).
Name and address of employer	International Organization of the United Nations Food and Agriculture Organization (FAO) - Viale delle Terme di Caracalla
Sector	Development and Research, Remote sensing, thematic cartography

EDUCATION AND TRAINING

1982	High School Diploma Art Section Architecture
2010	He received his degree in Environmental and Geomatic Engineering from the University of Rome Guglielmo Marconi - Thesis title: "GIS, spatial analysis and spatial-temporal planning"
2017	He received his MS degree in Civil and Environmental Engineering from the University of Rome Guglielmo Marconi - Thesis title: "Analysis and modeling of reticular structures"

ALLEGATO A: Scheda Biografica

professional qualifications	License to practice Graduate Engineer and Surveyor
2018	− License to civil infrastructure inspector RINA L1 (19VE00272PN5) L2 (19VE00453PN4)-L3 (20VE00494PN27)
2019	− Base test certifies the qualification Non Destructive Testing / Semi-destructive at the Level 3 CIV-21-00746-C Bureau Veritas
2020	− Visual testing and inspection of civil works and infrastructure (VT) - On civil structures and on cultural and architectural goods N. CIV-21-00577-C – Bureau Veritas – Level 2
2021	− Visual testing and inspection of civil works and infrastructure (VT) - On civil structures and on cultural and architectural goods N. CIV-21-00747-C– Bureau Veritas – Level 3

Mother tongue/e Italian

Other language

English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Listening	Reading
Good	Good	Good	Good	Good

Technical skills and competences

Management of technical projects sitemistica in Information Technology (IT / ICT) applied on: Geographic Information Systems (GIS SW development and project management), databases, spatial analysis, remote sensing multi-sensory (MIVIS, QuickBird, SPOT, ASTER , Landsat, MODIS), classifications, WebGIS.
- Digital Cartography (digital photogrammetry) - Geodesy GPS / DGPS / GNSS - Mapping (Cartographic Production) implementation of Spacemaps and orthophotomaps, realization of scientific cartography.
- GPR technology to tone and LIDAR - Laser Scanner 3d Model Compare detected (FARO)

Computer skills and competences

- UNIX Client / Server, Windows Client / Server
- IT, Database and Office: European Certification AICA - European Computer Driving Licence (ECDL)
- Intergraph environment: CAD / CAM, Microstation, MGE modules (MGNUC, MGAD, MGMAP, MGE Terrain Analyst, SW ImageStation, SSK, MGFN, MGAL, MGE Analyst, MGGA, MPMAN, Voxel 3D Analyst) Map Publisher, interplot, I / Geovec, GeoMedia Professional, WebMap, OnDemand.
- Remote sensing: ENVI, ERDAS, Iras / B, Iras / C, ISRU, Image Analyst.
- The environment ESRI Arc / Info, arcedit, Arcplot, AML procedures, ArcView.
- Open Source environment: OpenSees UC Berkeley, SAP2000, GRASS, Quantum GIS, Geoserver, Mapserver Deegree, Geo Tools, JTS Topology Suite.
- Relational databases: Oracle, Informix, MySQL, NoSQL, Access (PL

/ SQL, SQL * Plus, ODBC).
- Programming Languages: UNIX Shell Script-VisualC + +, Visual Basic, Java, VB.net, ASP, PHP, Object Pascal-Delphi (customization environments: GeoMedia, MGE, Arc / Info, ArcView, MapObjects).

Methodological keywords	FEA/FEM analysis, Structural analysis, Machine learning, Machine Vision, Deep Learning, Clustering Supervised/Unsupervised, classifications, convolution neural network (R-CNN), spatial modelling, change detection, data fusion, data integration, data mining, edge detection, geomatics, geostatistics, geovisual analytics, image interpretation, image processing, statistical analysis, pattern recognition, NoSQL, data warehouse, spatial analysis, remote sensing, space-temporal modelling, spatial autocorrelation, spatial multicriteria decision analysis, spatial statistical models, viewshed analysis, visual exploratory data analysis.

| Other experience | **2019-2021**
He is on the list of "Qualified Innovation Managers" of the Ministry of Economic Development. He is enrolled in the register of scientific experts of the European Commission Ecas, and is a consultant in the register of experts of the Civil Service.

2018
He is a member of the Department of Public Functions in the framework of the Operational Objective for Strengthening Operational Structures and Competences in Public Administration PON FESR

2017-2020
Research project evaluator for MISE, Autonomous Province of Trento

2016
He received an advisory contract with the Presidency of the Council of Ministers - Department for Programming and Coordination of Economic Policy (DIPE) in the framework of the Strategic Project "Indicators for Urban Policies"

2016
Registered with the experts of the Department of Public Administration as part of the operational objective to strengthen the operational structures and skills in the Public Administration PON FESR

2012
He is part of the register Reprise experts of the Ministry of University and Research of Legislative Decree no. 297/1999 as an expert in the subject area Civil Engineering and Architecture (surveying and mapping) and Mathematical and Computer Sciences (Operations Research). |
|---|---|

2010
Executive design of a photovoltaic system to be installed on a residential building in the municipality of Martina Franca province of Taranto - ASTREA

2010
Architectural and executive design of residential building in the Municipality of Martina Franca Province of Taranto - ASTREA

2008/2009
Mibac Central Institute of the catalog and documentation - General Command Arma dei Carabinieri - Professional collaboration for the technical scientific coordination of the SITA project "Archaeological Protection Information System" in the context of the PON Safety Program - Protocol No. MIBAC 8610 cl. 13.04.04 / 13 of the 28/12/2007

2008
Ministry of the Interior - General Command of Arma dei Carabinieri - Professional collaboration for the technical and scientific coordination of the SITA project "Archaeological Protection Information System" within the framework of the PON Safety Program

2007
University of Central Sicily "Kore" Scientific and technical involvement in the project "Nakhl Archaeological Survey and Excavation Project" - Southern Jordan - CNR-DPC / Univ. Kore - Enna of 10/26/2007

2007
Teaching assignment to the training course of "Technician for the protection of cultural heritage - Diagnostics and conservation"
Organized by: Consorzio Stedi - University of Tuscia

2007
Technical and scientific involvement with the Institute for chemical-physical processes - IPCF of the CNR for the detection with LIDAR instrumentation 3d laser scanner of the cave of Trabacche in Ragusa

2006
Teaching assignment to the Project "Training in the PON Safety for the development of the Mezzogiorno of Italy Mis. 1.5 "on GIS issues
Organized by: Education Studies Center - Formez - Protocol No. 14385 of 13/09/2006

2005

University of Rome "La Sapienza" Presidency of Humanities and Philosophy. Professional assignment to the definition of the data structure of the Territorial Information System within the Project for the "Census of Archaeological Cartography" funded by the Ministry for Cultural Heritage and Activities

2005
Lecturer in the Master's Degree in Geographic Information Systems applied to the planning and design of urban and rural areas, University "La Sapienza".

2004
CNR - IBAM Creation of the digital blank space from the QuickBird scenes in the Denizli area (Turkey) Orthorectification, geometric correction, radiometric and mosaic

2004
National Operational Program "Security for the development of Southern Italy" - Measure 1.3 "Technologies for the protection of environmental and cultural resources". Actions A.1 and B.3. "Teaching assignment for the course of Geographic Information Systems at the Regional Superintendence Office"

2003
MBAC-Ministry for Cultural Heritage and Activities "Teaching the course of retraining of internal officials" (Concepts of Cartography and GIS)

2002
University of Tuscia, Department of Sciences of the Ancient World Realization of archaeological cartography in scale 1: 25 000

2002
Archaeological Superintendence for Lazio - GPS surveys / DGPS (Nemi)

2001
Archaeological Superintendence of Puglia Data Recovery of the Territorial Information System (SW GEIPAV)

2001
InfoCartografica s.r.l Realization of thematic maps to 25.000 for the Emilia Romagna Region.

1998-2000
Univerisità of the studies of Lecce (Department of cultural heritage)
Development of a project on "Geographic information systems
dedicated to the management of ancient urban centers". (Development
SW Porting data from analytic photoreker in SIT).

1999-2000
University of Rome "La Sapienza" Contract for assignment of
professional services at the University of Rome "La Sapienza",
Development of a SIT dedicated to the national archaeological
bibliographic census (Development SW)

1999-2000
University of Rome3 Project on Remote Sensing Methodologies applied
to the knowledge of ancient urban centers (Libya) (Remote Sensing
Classification, Georeferencing Methods applied to Remote Sensing)

1998
SOGIS s.rl. & CNR-IRPI - University of Reggio Calabria, Department
of Environmental and Territorial Sciences Development of a project on
"Assessment of vulnerability of the Catanzaro isthmus for landslide
risk". (Remote sensing, Thematic mapping and GIS SW development)

1993-2001 Intergraph Italia LLC Consulting and teaching on SW
products / applications, workflow and Intergraph technology.
(Registered Research Laboratory - RRL)

1998
IDS Ingegneria dei Sistemi S.p.A. (Business Partner Intergraph,
Bentley, Oracle), Implementation of thematic cartography.

1999
SOGIS s.rl. realization of a SIT for the INPDAP real estate inventory.
(SW GIS Development)

Referees of international
scientific journals

Refereeing activities for the following journals: Elsevier: Applied
Energy, International journal of Medical informatics, Sustainable Cities
and Society, Theoretical Computer Science, Transportation research
Interdisciplinary Perspective. MDPI: Journal of Marine Science and
Engineering, Remote Sensing, ISPRS International Journal of Geo-
Information, Applied Sciences, IEEE Access. Taylor & Francis:
Applied Artificial Intelligence.

Digital certifications and reviewer summaries indexed on WOS see

Publications, journals, proceedings national and international conferences	Mauro Mazzei, Davide Quaroni - Development of a 3D WebGIS Application for the Visualization of Seismic Risk on Infrastructural Work Journal: ISPRS Int. J. Geo-Inf. 2022, 11 , 22. (ISSN): 2220-9964 December 30, 2021 CI: SJR Q1 (Geography, Planning and Development)IF: 2,971 Special Issue "Recent Advances in Web GIS Architectures and Applications" https://doi.org/10.3390/ijgi11010022

De Maria, M., Mazzei, M., Bik, OV, Palma, AL. - Analysis of Regional Imbalances in Italy Based on Cluster Analysis Journal: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) (ISSN): 03029743 (ISBN): 9783030869786 2021 CI: SJR Q2 Computer Science. IF: 1.36 DOI: https://doi.org/10.1007/978-3-030-86979-3_2

Mauro Mazzei. - An Unsupervised Machine Learning Approach for Medical Image Analysis Journal: Advances in Intelligent Systems and Computing (ISSN): 2194-5357 (ISBN): 9783030731021. 2021 CI: SJR Q2 IF: 1.36 DOI: https://doi.org/10.1007/978-3-030-73103-8_58

Capodiferro C., Mazzei M. - An Approach Adopted for Smart Data Generation and Visulization Problems Journal: ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences (ISSN): 21949042 2020 CI: SJR Q1 IF: 8,979 https://doi.org/10.5194/isprs-annals-VI-4-W2-2020-41-2020

Formica, A., Mazzei, M., Pourabbas, E., Rafanelli, M. - Approximate Query Answering Based on Topological Neighborhood and Semantic Similarity in OpenStreetMap Journal: IEEE Access (ISSN): 2169-3536 2020 CI: SJR Q1 IF: 3,367 DOI: https://doi.org/ 10.1109 / https://ieeexplore.ieee.org/document/9086014

Mauro Mazzei - An Unsupervised Machine Learning Approach in Remote Sensing Data Journal: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) (ISSN): 03029743 (ISBN): 9783030243012 2019 CI: SJR Q2 IF: 1.39 DOI: https://doi.org/10.1007/978-3-030-24302-9_31

Formica, A., Mazzei, M., Pourabbas, E., Rafanelli, M. - Approximate answering of queries involving polyline – polyline topological relationships Journal: Information Visualization (ISSN): 2220-9964 December 30, 2021 CI: SJR Q2 (Geography, Planning and Development) IF: 1.65 DOI: https://doi.org/10.1177/1473871617698516

https://journals.sagepub.com/doi/10.1177/1473871617698516

Formica, A., Mazzei, M., Pourabbas, E., Rafanelli, M. - Enriching the semantics of the directed polyline – polygon topological relationships: the DLP -intersection matrix Journal: Journal of Geographical Systems (ISSN): 2220-9964 2017 CI: SJR Q2 IF: 1,647 DOI: https://doi.org/10.1007/s10109-017-0246-1

M. Mazzei, AL Palma. - Spatial multicriteria analysis approach for evaluation of mobility demand in urban areas Journal: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)(ISSN): 03029743 (ISBN): 9783319624006 2017 CI: SJR Q2 IF: 1.39 DOI: https://doi.org/10.1007/978-3-319-62401-3_33

M. Mazzei, AL Palma. - A decision support system for the analysis of mobility Journal: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) (ISSN): 03029743 (ISBN): 9783319214696 2015 CI: SJR Q2 IF: 1.39 DOI: https://doi.org/10.1007/978-3-319-21470-2_28

D'Apuzzo, M., Evangelisti, A., Santilli, D., Buzzi, S., Mazzei, M., Bietoni, V. - New Smart Mobility Applications: Preliminary Findings on a Pilot Study in the Municipality of Artena Journal: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) (ISSN): 03029743 (ISBN): 9783030869786 2021 CI: SJR Q2 IF: 1.36 DOI: https://doi.org/10.1007/978-3-030-86979-3_1

De Maria, M., Fiumi, L., Mazzei, M., Bik, OV - A system for monitoring the environment of historic places using convolutional neural network methodologies Journal: Heritage MDPI (ISSN): 2571-9408 2021 CI:
DOI: https://doi.org/10.3390/heritage4030079

Mauro Mazzei. - A Machine Learning Platform for NLP in Big Data Journal: Advances in Intelligent Systems and Computing (ISSN): 21945357 (ISBN): 978-303055186-5 2021 CI: SJR Q3 IF: 0.626 DOI: https://doi.org/10.1007/978-3-030-55187-2_21

Mauro Mazzei - A Machine Learning Platform in Healthcare with Actor Model Approach Journal: Advances in Intelligent Systems and Computing (ISSN): 21945357 (ISBN): 978-303052245-2 2020 CI: SJR Q3 IF: 0.626 DOI: https://doi.org/10.1007/978-3-030-52246-9_41

Formica, A., Mazzei, M., Pourabbas, E., Rafanelli, M. - Querying distributed GIS with GeoPQLJ based on GeoJSON Journal: Geographical Information Systems Theory, Applications and

Management, GISTAM 2019
(ISBN): 978-989758371-1 2019 IF: SJR 0.17 DOI:
https://doi.org/10.5220/0007657201750182

Mauro Mazzei - Software development for unsupervised approach to
identification of a multi temporal spatial analysis model
Journal: Proceedings of the 2018 International Conference on Image
Processing, Computer Vision, and Pattern Recognition, IPCV 2018
(ISSN): 2220-9964 2018 CI: SJR 0.11 - h-index 3 IF: 0.77 in scopus
https://www.scopus.com/inward/record.uri?eid=2-s2.0-
85069202948&partnerID=40&md5=647960fe59b8309013277c333c498
146

Mazzei, M., Di Guida, S. - Spatial data warehouse and spatial OLAP in
indoor / outdoor cultural environments Journal: Lecture Notes in
Computer Science (including subseries Lecture Notes in Artificial
Intelligence and Lecture Notes in Bioinformatics) (ISSN): 03029743
(ISBN): 978-331995167-6 2018 CI: SJR Q2 computer science IF: 1.363
DOI: https://doi.org/10.1007/978-3-319-95168-3_16

Mazzei, M., Grifoni, P., Ferri, F., Caschera, MC, D'Ulizia, A. - MIS:
Multimodal interaction services in a cloud perspective Journal: Journal
of Next Generation Information Technology (ISSN): 20928637 2018
CI: SJR Q4 IF: 0.142

Pourabbas, E., Duffizi, A., Mazzei, M., Ricci, FL - SICS: A Social
Network Based Information System for the Inclusive Community
Journal: IEEE Xplore International Conference on Computational
Science
and Computational Intelligence (ISBN): 978-1-5386-2652-8 2017 IF:
5,224
DOI: https://doi.org/ 10.1109 / CSCI.2017.147

Mazzei, M., Palma, AL - Evaluating Principal Components Analysis of
Particular Spatial Statistical Models Magazine: GEOProcessing 2014
(ISSN):: 2308-393X (ISBN): 978-1-61208-326-1 2014
http://www.thinkmind.org/index.php?view=instance&instance=GEOPro
cessing+2014

Mazzei, M., Palma, AL - Comparative analysis of models of location
and spatial interaction Journal: Lecture Notes in Computer Science
(including subseries Lecture Notes in Artificial Intelligence and Lecture
Notes in Bioinformatics) (ISSN): 03029743 (ISBN): 978-331909146-4
2014 CI: SJR Q2 computer science IF: 0.354 DOI:
https://doi.org/10.1007/978-3-319-09147-1_19

Mazzei, M., Palma, AL - Spatial statistical models for the evaluation of
the landscape Journal: Lecture Notes in Computer Science (including

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Formica, A., Mazzei, M., Pourabbas, E., Rafanelli, M. - A 16-intersection matrix for the polygon-polyline topological relation for geographic pictorial query languages Journal: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) (ISSN): 16113349 (ISBN): 978-364232497-0 2013
CI: SJR Q2 computer science IF: 0.68 DOI: https://doi.org/10.1007/978-3-642-32498-7_23

Mazzei, M., Palma AL - Analysis of Localization and Space Interaction Models. Proposal of very good linked model applied to a study area for the localization of a large shopping mall Journal: Geomedia (ISSN): 11288132 2013 DOI: https://doi.org/10.1007/978-3-642-32498-7_23

MAZZEI, M.; MARCHI, ML - A Territorial Information System for Cultural Heritage: The GIS1 of the Census Project for the Archaeological Cartography of Italy. Journal: Digitalia (ISSN): 1972-6201 2012

Mazzei, M., Salvatori, A., Di Somma, A., Ferrari, V. - Web Map Service in archaeological research processes Journal: Archeology and Calculators, Supplement 2.0 (ISSN): 1120-6861 2009

Silvia Maria Chiodi; Mauro Mazzei; Giovanni Pettinato - The black stone of Nassiriya. On the sidelines of the archaeological reconnaissance mission carried out in Ur and Eridu (southern Iraq) (ISBN): 978-88-218-0981-1 2007 Proceedings of the Accademia Nazionale dei Lincei. Memoirs of the class of moral, historical and philological sciences

Mauro Mazzei - The swamp of Torre Flavia Contribution - Diachronic analysis of the transformation of the landscape (ISBN): 978-88-492-1145-0 2006

Mauro Mazzei - Lo sguardo of Icarus - Contribution - Methods of expeditious and precision georeferencing, orthophotoplanes (ISBN): 88-88168-12-5 2003

Research report	Mauro Mazzei - Knowledge of SMA & SNA technologies for cultural heritage - 2020
	Mauro Mazzei - Knowledge of SMA & SNA technologies for cultural heritage - 2020

Mauro Mazzei - ECOMUSEI.net platform - Centralized Data Warehouse - Ecomusei Project 2020

Mauro Mazzei - KNOWLEDGE OF APP BASED SYSTEMS IN CULTURAL HERITAGE - SW for indoor / outdoor localization - SW for visitor profiling - Ecomusei Project 2020

Mauro Mazzei - Definition of navigation techniques with visual continuity from geographic to local 2020

Mauro Mazzei - Analysis of the algorithms of the learning system of supervised neural networks - Project MARA 2020

Mauro Mazzei - Analysis of the algorithms of the learning system of supervised neural networks - Project MARA 2020

Mauro Mazzei - Definition of Requirements and Use Cases - SUMMa Project 2020

Mauro Mazzei - Analysis of vehicular flows through fixed cameras - SUMMa project 2020

Mauro Mazzei - Report on the results of the application of the chosen techniques on the problem of controlling the effects of the drug - PACIB project 2020

Mauro Mazzei - KNOWLEDGE OF APP BASED SYSTEMS IN CULTURAL HERITAGE – Ecomusei Project 2020

Mauro Mazzei - Cloud R2 Specific Researches Exploratory research activity report related to: Task 6.1, subtask 6.1.1, 6.1.2 and 6.1.3. BEST project 2020

Mauro Mazzei, Luigi Oscurato - Activity report on MANN thematic paths and acquisition of three-dimensional contents with stereoscopic image technique 2018

Mauro Mazzei - Report on the acquisition of knowledge of content outputs on holographic projection systems 2018

Mauro Mazzei - Report on knowledge and on the role that the sciences and
technologies of information and multimodal communication play in the sectors of culture 2018

Mauro Mazzei - Report on data analysis and software modules - MUS &

O project 2018

Mauro Mazzei - Acquisition of the knowledge and specifications necessary for the realization of the MUS & O system 2018

Mauro Mazzei - MUS&O system specifications 2018

Mauro Mazzei - Deliverable WP4 - Development of control algorithms of the DIRS project 2017

Mauro Mazzei - Deliverable WPRBLED 1.1 2016

Mauro Mazzei - Deliverable WPRLBS 2.n 2016

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Mauro Mazzei - Deliverable WPRMAL 4.1 2016

Mauro Mazzei - Deliverable WPRBECU 5.1 WPRBECUSW 5.1a 2016

Mauro Mazzei - Technical report - Photovoltaic system technical report 2011

Mauro Mazzei - IMRA Integrative flood risk governance approach for improvement of risk awareness and increased public participation 2010

Mauro Mazzei, A. Salvatori, Application of change detection for monitoring of archaeological sites in sensitive areas. The Iraqi case, Proceedings of the Conference "Earth SIM-V: Virtual Earth Simulation," Virtual Reality in Support of Earth Observation - Hall Faculty of Engineering - University of L'Aquila - Laboratory of Geomatics - May 4, 2011

MAZZEI M., S. MUSCO, A. Salvatori, C. D'AGOSTINI - Lapis Pallens: Integrated Research On Ancient Roman Quarries Of Red Tuff Aniene River Of Known As Latomies Of Living (London) 2011 ISBN: 978-88-905639 - 3-5

MAZZEI M., A. Salvatori, Geospatial analysis through to data mining repository screening of tuff quarries used in antiquity: Lazio Region case study, Proceedings of the 4th International Congress "Science and Technology for the Safeguard of Cultural Heritage of the Mediterranean Basin", Cairo , Egypt, 6th-8th (June 2009), p.224 - ISBN: 978-88-96680-31-5

The Look of Icarus (2003) (orthophoto, Map production)

Archaeological Map of Italy Viterbo 1 (2002) (production cartographic)

Emilia Romagna - CARG Project Geological Map of Italy - F254 Modigliana 1999 (Map production - Geodata INGV - Methodologies applied)

1998 - Scale 1: 50 000 - Atlas of desert locust habitats brreeding FAO 1993 - U8870 (Map production)

Worl Soils Resources Map Scale 1: 25 000 000 (Map production) FAO 1993 (66 REV. 1)

FAO Project AFG/90/002 From Export Arc / Info to Printing Processed (Map production) FAO 1996

Land Resources Appraisal of Bangladesh for Agricultural Development Map production) FAO 1994

Organization and participation in national and international scientific congresses	Event Title: 1st International Conference on Multidisciplinary Research and Innovative Developments Organized by Departments of Physics and Mathematic - ICMRID-2021 Venue: Virtual Event Date: 13th December, 2021 to 18th December, 2021 (One Week) Objectives: Presentation of research results: Analysis and innovative developments of technological ecosystems Other information: https://sites.google.com/view/icmrid-2021/session?authuser=1 Event Title: Webinar "ECOsystem of MUSEUMS on the net Location: Virtual Event Date: April 8, 2021 Objectives: In-depth day to highlight the results obtained by the EcomuseiNet project, based on active and experiential knowledge of the territory through an innovative way of visiting areas of interest and places thanks to the integration of ICT communication tools. Further information: http://www.diitet.cnr.it/webinar-ecomuseinet/ Event Title: International Communication Society - Ariadne's Thread 2021 Location: Milan Date: October 13, 2021 References: https://www.icsociety.eu/ Objectives: Presentation of research results: Technologies for cultural heritage Event Title: DIGISMART WORKSHOP 2021 Venue: ICCSA 2021, Cagliari, Italy (Blended form, part in presence, part online) Date: Sept 13 - 16, 2021 references: https://2021.iccsa.org/ Objectives: Organization of the workshop for the publication of scientific articles in the field of Digital Transformation and Smart City

and presentation of research results: Analysis of Regional Imbalances in Italy Based on Cluster Analysis
Other information:
http://labgeoinf.iasi.cnr.it/wordpress/index.php/digismart-2021/

Event title: Earth Ecosystem and Sustainable Development, Plants, People, Landscapes
Place: Rome University La Sapienza - Sala Lucchesi Dept. of Earth Sciences
Date: May 5, 2021
Objectives: Presentation of research results: Biodiversity agriculture and food "Observatory on Biodiversity".

Event Title: Future of Information and Communication Conference (FICC) 2021
Location: Virtual Event
Date: 29-30 April 2021 References:
https://saiconference.com/Conferences/FICC2021
Objectives: Presentation of research results at the conference: An Unsupervised Machine Learning Approach for medical image analysis

Event Title: Computing Conference 2020
Venue: Virtual Event
Date: 16-17 July 2020 references:
https://saiconference.com/Conferences/Computing2020
Objectives: Presentation of research results: A Machine learning platform in healthcare with actor model approach

Event Title: MUS&O project results presentation
Location: Virtual Event
Date: March 6, 2020
Objectives: Design of a mobile multimedia service platform for visitors of cultural poles, it aims to improve the visitor experience by making the visit of the cultural property more interactive and engaging.
Other information: MISE ministerial commission results presentation

Event Title: Presentation of BEST project results
Location: Matera
Date: May 29, 2020
Objectives: OR-6 - Research Cloud Specifications R2 - Objectives to be met:
1. Identification and analysis of "use cases" useful for the design of the technological infrastructure
2. Identification of measurable indicators to explain health risks
3. Data analysis and learning algorithms.
Other information: MISE ministerial commission results presentation

Event title: International Communication Society - The thread of Ariadne 2020

Location: Milan
Date: October 13, 2020 references: https://www.icsociety.eu/
Objectives: Presentation of research results: Building 21st century skills
with digital cultural heritage

Event Title: Intelligent Systems Conference 2020
Venue: Virtual Event
Date: 3-4 September 2020 references:
https://saiconference.com/Conferences/IntelliSys2020
Objectives: Presentation of research results A machine learning platform
for NLP in Big data.

Event Title: The 19th International Conference on Computational
Science and its Applications ICCSA 2019
Location: July 1 - 4, 2019 in Saint Petersburg, Russia in collaboration
with the Saint Petersburg University, Russia
Date: July 1 - 4, 2019 references: https://2019.iccsa.org/
Objectives: Presentation of research results: An Unsupervised Machine
Learning Approach in Remote Sensing Data.
Other Information: CNR Mission Order Number: 2019/130

Event Title: OFFF 2018 - Let's Feed The Future
Location: April 2018 Barcelona
Date: July 1 - 4, 2019 references: https://demodern.com/blog/offf-2018-
lets-feed-the-future
Objectives: Presentation of the research results of the MUS&O project.
Other Information: CNR Mission Order Number: 2019/61

Event Title: 1st MINOA PhD school - Mixed-Integer Nonlinear
Optimization meets Data Science
Location: Ischia
Date: 22-28 June 2019 references: http://www.iasi.cnr.it/minoa/big-
data-school/
Objectives: Coordination and organization for presentation of research
results.
Other Information: CNR Mission Order Number: 2019/60

Event Title: CSCE'18 - The 2018 World Congress in Computer Science
Computer Engineering, & Applied Computing
Location: Las Vegas, Nevada, USA
Date: July 30-August 2, 2018 References:
https://searchworks.stanford.edu/view/13946130
Objectives: Presentation of research results:
Other Information: CNR Mission Order Number: 2018/138

Event Title: WORKSHOP ASMAT 2017 - The 17th International
Conference on Computational Science and Its Applications (ICCSA
2017)
Location: July 3 - 6, 2017 in Trieste, Italy in collaboration with the

University of Trieste, Italy
Date: July 3 - 6, 2017 references: https://2017.iccsa.org/
Objectives: Organization of the workshop for the publication of scientific articles in Advances Smart Mobility and Transportation and presentation of research results: Spatial Multicriteria Analysis Approach for Evaluation of Mobility Demand in Urban Areas
Other information: https://2017.iccsa.org/workshops.html

Event Title: Esri Italian Conference 2016
Location: Rome
Date: April 2015 References:
https://www.esriitalia.it/component/eventiesri/calendario/145/soluzioni-e-tecnologie-per-la-mobilita-e-i-trasporti
Objectives: Pesentation of research results: Mobility analysis of large urban centers - Solutions and technologies for mobility and transport

Event Title: The 15th International Conference on Computational Science and Its Applications (ICCSA 2015)
Location: Banff, Alberta, Canada in collaboration with the University of Calgary
Date: June 22 - 25, 2015 references: https://2015.iccsa.org/
Objectives: Weighting of research results: A Decision Support System for the Analysis of Mobility.

Event Title: The 14th International Conference on Computational Science and Its Applications (ICCSA 2014)
Location University of Minho, Guimaraes, Portugal
Date: : June 30 - July 3, 2014 references: https://2014.iccsa.org/
Objectives: Weighting of research results: Analysis of Models of Location and Spatial Interaction.

Event Title: Esri Italian Conference 2014
Location: Rome
Date: April 2014 references:
http://mediageo.it/ocs/index.php/esri/15cue/paper/viewFile/39/81
Objectives: Weighting of research results: Analysis of Location Models and Spatial Interaction

Event Title: Esri Italian Conference 2013
Place: Rome
Date: April 2013
Objectives: Presentation of research results: Model Change Detection, Analysis in Urban Areas

Earth observation for monitoring and historical documentation of the territory - San Vito Romano - Sapienza University of Rome (2011)

Web Map Service in the process of archaeological research. IV Italian Workshop "Open Source, Free Software and Open Format in the

process of archaeological research" (27-28 April 2009)

Information Systems for Cultural Heritage, Land - Acquisition, organization, movement of data aimed at knowledge management and enhancement of cultural heritage - CNR Marconi Hall (2006)

Sapienza University of Rome - Tabula Imperii Romani - Production of thematic maps (2006)

CNR Uffico II DG - Museums of the Province of Catania (2005) (SW development management on specific ICCD)

IUGI 1985-2005 20th Anniversary THE GEOGRAPHIC INFORMATION SYSTEM OF COUNCIL. NEW TECHNOLOGIES OF KNOWLEDGE FOR THE PROTECTION AND RISK MANAGEMENT CULTURAL AND ENVIRONMENTAL Mauro Mazzei - CNR (2005)

GeoEsplora 2004 (Convention - Index figures, pattern recognition) Ecox, 2000: An interactive and decision support for the development of numerical indicators, spatial connectivity and aimed at the analysis of the landscape

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Curriculum (in francese)

ALLEGATO A: Scheda Biografica