# PhD Day: Le ricerche dei Ph.D candidates di Ingegneria e Economia

14 febbraio 2025 ore 9.00 • Dipartimento di Economia "Marco Biagi"

### PROGRAMMA COMPLETO

### 8.00 - 9.00, Affissione poster

# Aula Magna

# OVEST

### 9.00 - 9.20, SALUTI ISTITUZIONALI

Carlo Adolfo Porro, Rettore dell'Università di Modena e Reggio Emilia

Giacomo Cabri, Delegato del Rettore per la Didattica

### 9.20 - 10.00, SESSIONE PLENARIA: Il Dottorato e gli stakeholders del territorio: le possibili connessioni

### Intervengono

Davide Bezzecchi, Responsabile Ricerca & Innovazione - Unindustria Reggio Emilia;

Eleonora Costantini, Ricercatrice - Fondazione Marco Biagi;

Silvia Gaiani, Amministratore Delegato - V-System;

Gabriele Marzano, Direzione Generale Conoscenza, Ricerca, Lavoro, Imprese - Regione Emilia Romagna;

Marco Moscatti, Presidente Giovani Imprenditori Confindustria Emilia;

Davide Borghi, Manager of Advanced Analytics for Equipment Development & Technology - Tetra Pak® Italy;

Roberto Tonelli, Responsabile Powertrain Fluid Dynamics Simulation - Ferrari SpA.

### Coordina

Paolo Veronesi, Direttore della Scuola di dottorato E4E

### 10.30 - 11.30, SESSIONI PARALLELE 1

# Aula Magna

# **Graph Neural Networks and Structured Data Analysis**

# EST chair: ANGELO PORRELLO, Assistant Professor, "Enzo Ferrari" Department of Engineering

Development of deep learning techniques based on Graph Neural Networks for the integration of heterogeneous and multiscale

Capitani Giacomo data

Benaglia Riccardo Graph neural networks for structured data support and analysis

D'Ecclesiis Enrico Climate-change preferences and attitudes, and related policy and voting choices. Empirical "data and theory driven" analyses in the

Angelo Raffaele European contex

Menabue Martin Al techniques for time series analysis and prediction exploiting structured information Frascaroli Emanuele Graph neural networks for structured time series prediction in industrial application

# Sustainability, Innovation, and Risk: Shaping the Future of Business and Society

# chair: DAVIDE BASCHIERI, GRAF Industries Spa

# OVEST

Moving the Horizon Forward: How Vertical Farming Merges Technological Capabilities and Ancient Agronomical Knowledge to

Correggi Cecilia Change the World - (Videopillola)

Castrogiovanni

Antonino Country Image and Willingness to buy: The Mediating Role of Green Product Image in Consumers Perceptions (Videopillola)

Malagoli Federico Business model innovation in family businesses: Factors, dynamics and strategic implications

Contiero Nicolò The challenge of sustainability: regulatory enforcement vs market logic. An even match?

Fratantonio Federico Labor relations in craftsmanship and small and medium enterprises (Smes)

Bellinvia Adriano The Influence of Climate Risk on Bank Credit Risk: Evidence from the European Banking Sector - (Videopillola)

### **Advances in AI Models and Learning Paradigms**

# chair: VITTORIO CUCULO, Assistant Professor, "Enzo Ferrari" Department of Engineering

# Aula 4 EST

Sarto Sara Advances in (Self-attentive and semi-supervised) AI Architectures for large scale, explainable Image Retrieval - (Videopillola)

Bonicelli Lorenzo Few shot and zero shot continual learning

Cocchi Federico Exploring Multimodal Challenges in Generative AI

Trustworthy self-attentive models for visual-semantic understanding - (Videopillola) Amoroso Roberto

Integration of vision and language for human-robot interaction Niyati Rawal

# Corporate and Welfare in Transition: Innovation and Social Protection

### chair: VALERIA MARTINELLI, Gruppo Hera Spa

Aula 7 EST

Nizzoli Federica The digital and green future of active and passive public welfare policies: the case of the Emilia-Romagna Region (Videopillola)

Molinari Giuseppe Substitution or complementarity? The impact of artificial intelligence on employment in 25 European countries

Smart Working in Tetra Pak® Italy: Building an Operational Model that Boosts Productivity and Enables Work-life Balance -

Ombelli Elisa

Muratori Elena Again on the financial treatment of medical residents: the united sections exlude any reassesment, even partial

Nannetti Francesca Employees' attitudes and Work-Related Stress in the Digital Workplace: an empirical investigation

### **Biomedical Engineering and Sensing Technologies**

Aula 3 **OVEST**  chair: CARLO AUGUSTO GRAZIA, Assistant Professor in tenure track, "Enzo Ferrari" Department of Engineering Detection and Tracking of the Small Movements of Extended Targets through Mmwave Multiple-Input Multiple-Output Radar

Vignoli Elia Systems

Furnari Gabriele Machine Learning and Robotics for Surgical operations

Martelli Andrea From Production to Application: Novel Biomaterials for Tissue Engineering

Carotenuto Carlo Exploring The Effects Of Operating Temperature And Pressure On Aeration In Gear Pumps Designed For Dialysis Machines

Di Pinto Valentina Optoelectronic sensors for biomedical instrumentation: theoretical and experimental studies

### **Low-Power Electronics and Computing**

Aula 2 **OVEST**  chair: PIERPAOLO PALESTRI, Full Professor "Enzo Ferrari" Department of Engineering

Neuromorphic Computing Hardware for Low-Power Edge-A Nanosecond timescale self-heating effects in advanced FinFET and FDSOI nanoscale MOSFETs - (Videopillola)

Tondelli Lisa Ferretti Corradi

Benatti Lorenzo

Antennas, ElectroMagnetic Compatibility (EMC) and electromagnetic simulations-Riccardo Giorgino Giovanni Caratterizzazione e simulazioni TCAD di dispositivi di potenza in nitruro di gallio

# **Sustainable Electric Mobility and Green Transportation**

### chair: RICCARDO LANCELLOTTI, Associate Professor "Enzo Ferrari" Department of Engineering

Aula 5 EST

Petrelli Gaia High Performance rare earth free Electric Motors for a sustainable and greener transportation - (Videopillola)

Sassetti Riccardo Design of more-electric tractors for a more sustainable agriculture

Addressing Grand Societal Challenges through Data Sharing: Essays on Data Ecosystems in the Context of Integrated Mobility in

Renzi Giulia

Giannotta Nicola High Performance rare earth free Electric Motors for a sustainable and greener agriculture Guiducci Alessandro High reliability and High efficiency electric motor drives for green transportation applications

Cutuli Gregorio High reliable and sustainable Electrical machines for vehicle electrification-

Aula Seminari **OVEST** 

# **Advanced Modeling and Complex Dynamics**

Boga Gabriele

chair: SILVIO SORRENTINO, Associate Professor, "Enzo Ferrari" Department of Engineering Multiscale phenomena in turbulent boundary layers

Totaro Giuseppe Simulation of an External Gear Pump Using a 0D Model

Mazzeo Francesco

Molaie Emamzadeh

Modeling and simulation of a small-scale side-by-side helicopter for Urban Air Mobility

Moslem Spiral Bevel Gear: Nonlinear Dynamics and Chaos Analyses

### 11.30 - 12.00, PAUSA e PRESENTAZIONE POSTER

### 12.00 - 13.00, SESSIONI PARALLELE 2

### **Computer Vision and Image Processing**

# Aula Magna

### chair: VITTORIO CUCULO, Assistant Professor, "Enzo Ferrari" Department of Engineering

**EST** 

Barsellotti Luca Open World and Few-Shot Object Detection and Semantic Segmentation Di Nucci Davide Computer Vision technologies for 3D Vehicle digitization and understanding

Pippi Vittorio Handwritten Text Generation for Recognition: From Visual Archetypes to Auto Regressive Models

Quattrini Fabio Computer Vision Solutions for Cultural and Historical Multimodal Sources - (Videopillola)

Fincato Matteo 3D Human pose estimation in industrial environments Mancusi Gianluca Deep learning for Multiple Object Tracking and 3D

### Technology and Work: Legal and Social Implications of the Digital Revolution

# Aula Magna **OVEST**

chair: ILARIA PURIFICATO, Postdoctoral Research Fellow, Department of Economics - Marco Biagi Foundation

The regulation of employment relationships in the platform economy: the digital productive unit and the revision of traditional

Luccisano Matteo frameworks

Pasqualicchio Pierluca

Baldassarre Professional classifications after the 2019/2021 national collective agreements

Corporate welfare on the path of universal social protection: the redistributive purpose between collective bargaining and tax

Verzulli Veronica

Control power and disciplinary power of the remote working in the Pubblic Administrations: from the discipline to its

Gagliardi Francesca implementation in the National Labor Inspectorate

The impact of new technologies on employer guarantee positions Frisella Giovanna

Barone Valeria The missing principle. Algorithmic non-discrimination and the legal protection of the person in the age of Al

# AI for Scientific Research and Emerging Applications

### chair: LORENZO BARALDI, Associate Professor "Enzo Ferrari" Department of Engineering

Aula 4 EST

Panariello Aniello Al techniques for time series analysis and prediction exploiting structured information

Bonisoli Giovanni Deep learning for Event Extraction from Web Data Streams

Maximizing Quality in Mars Observation Scheduling: Challenges and Uncertainty Ferrari Benedetta Vezzali Enrico Fast super-resolution of 1D and 2D barcodes for real-time Industrial Applications

Di Piano Ambra Deep learning in real-time on the astrophysical data obtained from the Cerenkov CTA Observatory

# **Innovations in Electrical Machines and Sensing Technologies**

### chair: PASQUALE DI VIESTI, Assistant Professor, "Enzo Ferrari" Department of Engineering

Aula 7 EST

Vogni Mattia Wide-bandgap based Power converters for improved efficiency and reliability-

Multi-physics optimization of permanent magnet electric machines: comparison of parametric and topological approaches and

Puglisi Francesco implementation of a hybrid methodology

Sala Giada Novel high performance electric motors by means of additive manufacturing and innovative materials

Lorenzo Nicolini Development of a piezoelectric elastomer for sensing applications

Notari Riccardo Design of High efficiency and sustainability oriented electrical machines - (Videopillola)

### Healthcare Systems and AI Innovations

Aula 3 **OVEST** 

Aula 2

chair: FEDERICO BOLELLI, Assistant Professor in tenure track, "Enzo Ferrari" Department of Engineering

Piombini Edoardo

Renato Effects of chain ownership on competition and delivery in the Emilia-Romagna (Italy) Care homes sector

chair: MARIA FRANCESCA BONILAURI, Postdoctoral Research Fellow - "Enzo Ferrari" Department of Engineering

Perliti Scorzoni Paolo Digital Transformation and Machine Learning applied to Public Healthcare

Lumetti Luca Healthcare applications of Artificial Intelligence, Computer Vision and Medical Imaging

Goldoni Daniele Advanced integrated electronic biosensensors for nanoscale entity detection

Guida Francesca Sustainable finance and financing of biomedical research

# **Materials and Surface Engineering**

**OVEST** 

Bortolotti Luca Developing sustainable Wear and Corrosion-Resistant Coatings

Reza

Moghimimonfared Hexagonal tessellations exhibiting negative Poisson's ratio

Franciosi Mattia Shot-Earth: A Material for Structural Engineering Siciliani Vincenzina Adaptive optics solution to improve laser surface structuring

Ferrari Elisa Surface modification of titanium components for motorsport industry by diffusion threatments

Cardu Marco Fatigue behavior of components manufactured through additive manufacturing

# **Advanced Technologies and Diagnostics in E-Mobility**

### chair: CARLO AUGUSTO GRAZIA, Assistant Professor in tenure track, "Enzo Ferrari" Department of Engineering

Smart Sensors based on Nanomaterials for Advanced Monitoring and Diagnostics: Development, Fundamentals and

Aula 5 EST

Galstyan Vardan Multifunctionalities

Benatti Dario Single-Stage CSI with Discharge Path: a novel topology for motor drive applications

Righi Stefano Comprensive EMI Filter design in EV On-Board Chargers: Modelling, Simulation, and Compliance with Automotive Standards

Flori Elisa Evaluation of the pandemic impact on global automotive supply chain through network analysis

Mirabella Michele Vehicle-to-everything (V2X) Communications for Green and Reliable Intelligent Transportation Systems

Aula Seminari

# **Energy Solutions and Environmental Models**

### chair: LUCA LUSVARGHI, Associate Professor, "Enzo Ferrari" Department of Engineering - Coordinator ICAM

**OVEST** Sfriso Stefano

Hydrogen thermo-diffusive instability effects in internal combustion engines: a modelling approach

Pavan Anna Direct Numerical Simulation of a paradigmatic Urban Heat Island

Numerical modeling of high coupling multiphase-energy systems for efficiency improvement and detailed investigation of physical

Francesco Orlandi

Kaya Elif Investigating the Impact of Varied C-Rates on Lithium-Ion Batteries: A 1D Simulation Study Zuccarini Ermanno Urban Heat Island - LSTM neural networks for modeling and fab city approach for mitigation

### 13.00 - 14.30, LUNCH e PRESENTAZIONE DEI POSTER

### 14.30 - 15.30. SESSIONI PARALLELE 3

Garuti Fabrizio

# Al for Finance, Healthcare, and Industrial Applications

# **EST**

Aula Magna chair: DANIELA PENNETTA, Postdoctoral Research Fellow, Department of Economics - University of Modena and Reggio Emilia Al in Fintech: Semi-supervised Learning for Transactional Time Series and Financtial Data

> Responsible AI in Vision and Language: Ensuring Safety, Ethics, and Transparency in Modern Models Poppi Samuele

Mozzillo Angelo High Perfomance Data-Integration for Al-

Millunzi Monica Novel deep Learning techniques under weakly and uncertain annotation in continuous and batch regime

Baraldi Lorenzo Detecting and Understanding the Content Produced by Diffusion Models: An In-Depth Analysis - (Videopillola)

# Bridging Gaps: Gender Equality, Inclusion, and Human Wellbeing

# **OVEST**

# Aula Magna chair: FEDERICA PALMIROTTA, Postdoctoral Research Fellow, Law Department - University of Modena and Reggio Emilia

Barra Carlotta Gender inequalities and gender wage gap in Academia. The case of an Italian university

Nepoti Francesca What does inclusion look like for the most vulnerable? Narratives of exclusion for migrant working mothers in Modena

Pagani Maria Beatrice Tools for promoting female and gender inclusion

Scarpa Antonella The aspiration for the future of the young generations of Modena and the school as a space of possibilities

Negri Isabella Teachers' wellbeing: occupational violence, social relationships and individual coping strategies. A qualitative study.

Fusari Carlo Navigating the in-betweenness: collaborative and youth spaces in Emilia-Romagna, Italy

# Big Data, AI and sectoral applications: justice, health, energy, industry

### chair: FEDERICA ROLLO, Assistant Professor, "Enzo Ferrari" Department of Engineering

Aula 4 EST

Guiduzzi Giacomo Data analysis of the criminal and civil trial in order to structure a predictive system of the times of the trial-

Livaldi Andrea Big Data per processi industriali sostenibili Trigiante Lisa Privacy-Preserving Record Linkage for E-Health

Baraldi Andrea Intelligent Techniques and Natural Language Processing for (Explainable) Data Integration Aslam Adeel Big Data and Artificial Intelligence for Energetic Virtuosity in Local Energy Communities

### **Sustainable Solutions and Green Mobility**

# chair: LUCA LUSVARGHI, Associate Professor, "Enzo Ferrari" Department of Engineering - Coordinator ICAM

Aula 7 EST Altimari Fabiana Volcano-sedimentary rocks for green transition: valorization and recovery for the design of sustainable materials

> Campanelli Ludovico Thermal management of new sustainable vechicle powertrains

> > Fuel consumption of diesel, natural gas, hybrid, full electric and hydrogen fuel cells based buses: a simulated comparison using

Kaya Ahmet Fatih standard road cycles and gradeability tests

Poppi Giulia Surface Treatments for green hydrogen production

Ebrahimnejad Razieh Nonlinear Dynamics of Coupled Electro-mechanical Transmission Systems

# **Optimizing the Ceramic Tile Industry**

#### chair: DINO BOCCACCINI, Assistant Professor, "Enzo Ferrari" Department of Engineering Aula 3

**OVEST** 

Taccini Marco A Hybrid Approach for Pallet Loading in Ceramic Tile Industry

Integrating Extended Reality technologies and Digital Twin for Sustainable Human-Centric system design: application to Ceramics

Contini Giuditta industry

Magnani Matteo SolvingThe Pallet Loading Problem with Layering

Dotti Giulia Decision Support Systems for Internal Logistics Optimization in the Ceramic Tile Industry

Andrei Ungureanu Ceramic Pigments: Advances in Sustainable Production

# Energy, Sustainability, and Industrial Innovation

#### chair: SARA MANTOVANI, Associate Professor, "Enzo Ferrari" Department of Engineering Aula 2

**OVEST** 

Oldoini Davide Vibroacoustic analysis of an electric motor with reduced rare earth content

Catellani Mattia Coordination of UAVs with Limited Sensing Capabilities in Communication-denied Areas

Leopardi Luigi Development of digital twin model for industrial machinery

Numerical modeling of high coupling multiphase-energy systems for efficiency improvement and

Orlandi Francesco detailed investigation of physical phenomena

Cavecchia Mirko An Optimization-based Decision Support System for Pharmaceutical Distribution

# **Smart Robotics and Social Navigation**

# chair: GIADA COLELLA, BMW AG

Aula 5 EST

Social navigation of robots moving in crowded environment - (Videopillola) Ruo Andrea

Braglia Giovanni Methods for a novel collaborative robotics: from programming to human skills transfer - (Videopillola)

Nini Matteo Safety-Oriented Robot Control in Industrial Applications

Extending Robotic Manipulation apabilities by Cooperative Mobile and Flexible Multi-Robot Systems - (Videopillola) Onfiani Dario Ferrarini Sergio Accuracy Assessment and Compensation with Integrated Design Tools for Efficient Robotic Production Systems

Barnabei Filippo A constraint based control architecture for Urban Autonomous Vehicles - (Videopillola)

### Water Flow, Liquid Metals, and Resilient Infrastructure

Aula Seminari **OVEST** 

# chair: STEFANO ORLANDINI, Full Professor, "Enzo Ferrari" Department of Engineering

Serviceability assessment of footbridges under flexural and torsional vertical vibrations: simplified crowd modelling and vision-based

Eslami Varzaneh Ghita monitoring

Pizzileo Simone Flood Plain Inundation Modeling With Explicit Description of Land Surface Macrostructures Trane Danila Comparison between experimental and DNS data of liquid metal flow in a triangular rod bundle

Soni Rachit Monte Carlo Analysis of levees affected by mammal bioerosion.

Gasperoni Riccardo Two-Dimensional River Flow Modeling With Explicit Description of Woody Vegetation

### 15.30 - 16.00, PAUSA

# 16.00 - 17.00, SESSIONI PARALLELE 4

# **Natural Language Processing and Multimodal Learning**

chair: ANGELO PORRELLO, Assistant Professor, "Enzo Ferrari" Department of Engineering

**EST** 

Cartella Giuseppe Multimedia Learning for Automatic Metadata Extraction from Cultural and Historical Archives

Moratelli Nicholas Document Understanding e Natural Language Processing

Monturano Gianluca Predicting Delays in Cohesion Infrastructure

De Grandis Luca Deep Learning for Natural Language Processing and Document Understanding

Granata Francesco Ma Multimodal Retrieval Augmented Generation for Question Answering and Information Extraction

### Industrial Evolution and Digital Innovation: Media, Business and Management

# Aula Magna OVEST

# chair: DANIELE MAGNALDI, Risk Management Intesa SanPaolo

Lorenzetti Marco Cable Television in Italy: notes on an economic and industrial history

Macaluso Matteo Cable Television in Italy: notes on an economic and industrial history (part 2)

De Vivo Luigi Certification and business networks: an opportunity for a "legally assisted" development of industrial projects

Aurelio Giulio Mario The Entrepreneur's Responsibility in Productive Outsourcing: Models for Managing Joint Liability

Melis Erika Analytics for people: Concepts and tools for the data-driven transformation of Human Resource Management - (Videopillola)

### Advanced data management and AI in complex environments

# chair: LAURA PO, Associate Professor, "Enzo Ferrari" Department of Engineering

Aula 4 EST

Casari Martina Artificial intelligence techniques to tackle urban air pollution

Sala Luca Data Management, analytics and intelligent Al-based knowledge extraction for multilingual and multi-alphabetic heritages

Sania Aftar Data Management, analytics and intelligent Al-based knowledge extraction for multilingual and multi-alphabetic heritages

De Sabbata Giulio Data-centric Al, Big Data, Data Integration, Energy data, Process optimization

Consegna dei premi alle migliori tesi - ICT

# **Energy Storage and Efficiency**

### chair: SIMONE PEDRAZZI, Associate Professor, "Enzo Ferrari" Department of Engineering

Aula 7 EST

Ermini Matteo Data-driven estimation of Battery Capacity

Girimonte Aldo Materials synthesis for advanced energy storage systems

Mucciarini Mirko On incorporating variable consumption functions within energy-efficient parallel machine scheduling

Magnani Mauro HYENAS/HYdrogen as ENergy carrier for industrial ApplicationS

Cossu Michele Evaporative cooling and Maisotsenko cycle: stand-alone and hybrid applications

# **Biomaterials, Preclinical Studies and Optimization**

Aula 3

# chair: ELENA COLOMBINI, Associate Professor, "Enzo Ferrari" Department of Engineering

OVEST

Gerardo Novel ion-enriched Bioactive Glass compositions for scaffold manufacturing: bone tissue and wound healing.

Baridi Ghassem Optoelectronic methods and instrumentation for biomedical smart sensors

Studying host-pathogen interaction via microscopy and Deep Learning: application to antimicrobial resistant bacteria and

Pianfetti Elena monoclonal antibodies discovery

Salvatori Roberta Bioactive glasses and preclinical evaluation for tissue repair and regeneration

Rubino Claudia Functionalization of abutment surface for dental prosthesis

# Innovations in Industry 5.0 and Sustainable Solutions

Aula 2 OVEST

### chair: ALBERTO VERGNANO, Associate Professor, "Enzo Ferrari" Department of Engineering

Khamaisi Riccardo

Mecca Francesco

Karim A UX-driven digital framework to design human-centric solution in industry

Alessandro Neri Sustainable energy transition: Leveraging end-of-life electric vehicle batteries for stationary storage systems

Borghi Simone Investigating Stress Patterns in Industry 5.0

### AI and Robotics for Complex Systems

### chair: ROBERTO VEZZANI, Associate Professor, "Enzo Ferrari" Department of Engineering

Aula 5 EST

Jabbar Abdul Bearing Fault Classification for Independent Cart Systems

Coniglione Casimiro Autonomous and intelligent weapons: between side effects and lack of rules of engagement

Bertoli Annalisa An IoT Software Architecture for User-Friendly Fault Diagnosis and Identification

Pandolfi Antonio Engineering Approaches for Model-Based Design and Virtual Prototyping of Flexible Robotic Cells

Aula Seminari OVEST

# **Innovation and Applied Technology**

# chair: GIOVANNI BOLELLI, Associate Professor, "Enzo Ferrari" Department of Engineering

Oliva Maniva Towards Ecological Polycarbonate: Strategies for Reuse and Waste Reduction in a Circular Economy Perspective

Modena Marco Modeling and simulation of a vibrating membrane for the acquisition of lung sounds

Valentini Lorenzo Human Factors as Key Drivers for Machine Design Optimization

Hugo Vidigal Corrêa

Victor A simulation based metaheuristic for the multi-period team orienteering problem with time windows and stochastic demands

# 17.00, SESSIONE PLENARIA: Lo sguardo dell'Università sul futuro del dottorato

# Aula Magna OVEST

# **TAVOLA ROTONDA**

Paolo Pavan, Delegato del Rettore per la Ricerca;

Tindara Addabbo, Referente della sede UNIMORE del D.I.N. in Gender Studies, Università di Bari;

Alessandro Capra, Delegato del Rettore per l'Internazionalizzazione;

Rita Cucchiara, Referente della sede UNIMORE del D.I.N. in Al per la società, Università di Pisa;

Grazia Ghermandi, Referente UNIMORE per il D.I.N. in Sviluppo Sostenibile e Cambiamenti Climatici, IUSS Scuola Universitaria Superiore Pavia.

Modera: Tommaso Fabbri, Vice-Direttore della Scuola E4E

# PRESENTAZIONI POSTER

1 Almirante Italo	Self-Learning Robotic Platforms: a "lazy" approach for multi-robot task solving
2 Andreani Mattia	Vehicular Communications in 6G
3 Benassi Riccardo	Development, implementation and testing of techniques based on time series and data mining to environmental, hydrological and hydraulic data
4 Bernardelli Giacomo	Vapor deposition coatings for hard chrome replacement in internal diameters of mechanical components
5 Bernardi Mattia	Supervised and self supervised AI and deep learning for animal analysis
6 Besi Giulio	Medical Robotics for Upper Limb Rehabilitation
7 Betti Alice	Analysis of the dynamic behavior of electro-hydraulic systems: simulation approach applied to a mini excavator
8 Bodini Alberto	Active car suspensions with multiple actuation: a method for simultaneous camber and toe control
9 Buzzega Pietro	Continual Knowledge transfer across different deep learning architectural paradigms
10 Binoy Aneena	Urban CO₂ Measurements Using the Eddy Covariance Technique
11 Caffagni Davide	Computer Vision and Natural Language Processing Technologies for Analysis and Understanding of Cultural and Historical Archives
12 Cagossi Laura	The employment relationship of honorary judges: features and guarantees in the Italian and EU legal system
13 Caiani Angelo	Components' dynamic optimization using lattice structures
14 Canovi Chiara	Evaluating the impact of TiO₂ Microstructures on the Photocatalytic Oxidation of Nanoplastics
15 Capitanio Alessandro	
16 Cescon Margherita	Thermal Barrier Coatings deposited by Hybrid Suspension+Solution Precursor Plasma Spray: Gadolinium's Role in CMAS and Thermal Cycling Fatique Resistance
17 Chirico Francesco	Success and Tecnostress in the digital transition of judicial offices
18 Claps Marco	A Re-optimization Heuristic for a Dial-a-Ride Problem in the Transportation of Patients
19 Cogliani Francesco	Numerical modeling of a tire for structural and dynamic analysis in vehicle applications
Contalbo Michele 20 <u>Luca</u>	Integrating NLP and Data-driven Techniques for Intelligent text analytics
21 Corda Giuseppe	Three-Dimensional CFD Modelling of PEM Electrolyzers
22 Dallari Veronica	Multi-temporal DInSAR based approach for foundation settlement estimation
23 Dalseno Luca	Hydrogen and eFuels as innovative energy sources for internal combustion engines supported by a 3D/0D-CFD modeling approach
24 Davi Giovanni	Let it snow
25 De MiccoSimone	Bioceramic materials in dental applications: state of the art and future perspectives
26 Di Mauro Filippo	Democracy and cooperative models in regional governance of ecological transition: the experience of energy communities

27 Fave Alassander	Lavorania a Obraziala airad Cira ada fan Fahara ad Harrana Dahat Internation
27 Fava Alessandra	Leveraging Physiological Signals for Enhanced Human-Robot Interaction
28 Favali Filippo	Toward AI agents embodiment in robotics
29 Ferrari Elisa	Titanium: how to improve wear behavior
	Current Source Inverters in Motor Drive Applications
31 Filippini Gianluca	Deep Learning for the localization of audio-visual sources
32 Finistrella Salvo	Multi-Agent Reinforcement Learning in Cybersecurity
33 Fiorini Cosimo	Resilient continual learning with attention based architectures
34 Gabbi Marta	Prediction of human motion trajectories for heterogeneous human-robot interaction
35 Gallerani Alessia Gambigliani Zoccoli	Innovative sensor development for biomedical applications
36 Giovanni	Cybersecurity for Cyber-Physical systems
37 Genzardi Dario	AI-IoT monitoring system based on collaborative sensor platform for quality monitoring along the food production chain
38 Giovanelli Giulia	Soft X-Ray Spectroscopies for the Investigation of Nanostructured Materials
39 Gozzi Marica	Additive manufacturing and conventional machining
40 Greco Laura	Workplace safety in the framework of Environmental Sustainability
41 Grespan Mattia	Multiscale modeling of thermofluid systems
42 Gualdi Daniele	Self-excited Vibrations in Nonlinear Multibody Models of Automotive Drivelines
43 lotti Simone	Shot-Earth - Continuation of the durability assessment
Kontchou Tenda	Thermal optimization of additively manufactured heat exchangers and, the effect of geometry and surface roughness on
44 Arnaud	perfomance
45 Lucchese Adriana	Exploiting Non-Gaussian distributions in Hidden Markov Model for bearing prognostics
46 Manghi Ilaria	Liver tumor segmentation and classification for HCC diagnosis
47 Mantovani Mattia	Distributed Ergodic Coverage Control of Unknown Spatial Processes
48 Marchesini Kevin	Deep Learning techniques and multimodal learning in Biomedical Sciences and Medical Robotics
49 Martini Pierpaolo	1D - 3D air cooling model for stack of hydrogen fuel cells: application to a light aircraft as a case study
50 Martoccia Lorenzo	HyPoST - Development of a Simulink model for Fuel Cell electric vehicles
51 Mengozzi Alessandro	Stresses and Deformations induced by Curing in Epoxy Matrix CFRPs Composite Laminates
52 Mercogliano Nicola	Simulation-Driven Design of Automated Manufacturing and Assembly Lines: Enhancing Efficiency and Performance
53 Messina Simone	Finite Element Methodology for structural analysis in electric motor gears
54 Miccolis Francesca	Multimodal integration for molecular and imaging data
55 Miconi Lorenzo	Development of high entropy hardmetal coatings for tungsten carbide substitution.
56 Modica Lorenzo	Wide-bandgap based devices for efficient power conversion
Montagneretto 57 Alessandro	A Comprehensive Numerical Approach for the Simulation of the Pneumatic System of a Ceramic Dryer
58 Morandi Riccardo	Engineering Digital Twin LifeCycle & Augmentation Function
59 Moroni Filippo	Drag reduction in temporal turbulent boundary layers through wall oscillations
60 Mosconi Matteo	Continual Supervised and self supervised Learning applied to image and video analysis
61 Napolitano Martina	Sustainable Practices in Environmental Remediation and Fertilizer Production: A Dual Approach
or Napolitano Martina	Nicolini Development of hardware platforms and simulation tools for label free biosensing based on micro- and nano-electronic
62 Nicolini Jacopo	devices and circuits
63 Paganelli Michele	The relationship between competitiveness and environmental sustainability in EU regions
64 Paggetti Simone Parascandolo	Additive manufacturing and food contact
65 Fiorenzo	Causal Graphical Models for Vision-Language Compositional Understanding
66 Parmeggiani Davide	Downscaling of global datasets to study UHI and UPI interactions
67 Pasquinucci Federico	Next Generation of Connected Vehicles
68 Pioli Andrea	Optimizing energy flows: enhancing efficiency in robotic systems
69 Pitardi Marco	Soil Flux and Atmospheric Dispersion of VOC emitted from Contaminated Soils: Modelization and Field Measurements
70 Poppi Tobia	Responsible and Safe AI for Multimodal Models in the GenAI Era
71 Quattromini Federico	More-electric tractors for a more sustainable agriculture
72 Rago Evan	Reasonable adjustments and workplace inclusion: the progressive development of protective frameworks in legislation and case law

73 Restaino Enza	The phenomenon of Data Breaches in healthcare sector
74 Rezvanpour Hamed	Integrated and robust design methods for parts and foundry equipment to improve aluminum alloy recycling in EU
75 Ricci Cosimo	Thermal spray coatings for hard chrome replacement in aerospace components
Roberto Sedoni 76 Roberto	SedoniStudy and development of innovative solutions for heating, ventilation, and air conditioning for near-zero energy building
77 Rossi Daniel	Computer Vision and IoT for Human Robot Interaction
78 Rossini Enrico	Data Engineering for Smart City Applications
79 Salami Riccardo	Continual Federated Learning for industry
Sanchez Justine Ann 80 Lemon	Adherence between innovative construction materials
81 Sanguigni Fulvio	Multimodal image editing for fashion design
82 Sciurti Gianmarco	Energy regeneration in buildings with intermittent use
83 Simeone Filippo	Accelerating the Future: The Rise of Electric Vehicles in Italy
84 Soldati Luca	PostBuckling stability analysis of shear deformable beam
85 Sullutrone Giovanni	Exploring the Potential of Large Language Models for Multilingual Historical Document Analysis and Semantic Cataloguing in Digit Libraries
86 Tessier Yves	A new formalism improving RANS eddy viscosity models
87 Tomassetti Valeria	Measuring gender equality to drive transformative processes in companies
88 Tonelli Roberto	Hydrogen High-Specific-Power Internal Combustion Engine: how to increase specific power and improve efficiency while respecting NOx emission limits
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