CIVIS A European Civic University

CIVIS call for researchers MSCIF 2020

PANEL: Information Science and Engineering (ENG)

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AIX MARSEILLE UNIVERSITE - France				contact person: civis@univ-amu.fr	
SUPERVISOR	RESEARCH LAB/GROUP	AREA OF EXPERTISE	LINES OF INVESTIGATION	KEY FACILITIES	WEBSITE
Mouloud Adel	Computer Sciences and electrical engineering	Signal and image processing	Fresnel Institute (IF) is a leading lab in optics Photonics ans signal end image processing in south east of France. The main research topic of GSM (Multidimensional Signal Group) of IF is computer-aided diagnosis using signal and image processing techniques as well as machine learning approachs.	Fresnel Institute has 190 people, 36 Post-Doc	https://www.fresnel.fr

NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS – Greece					
SUPERVISOR	RESEARCH LAB/GROUP	AREA OF EXPERTISE	LINES OF INVESTIGATION	KEY FACILITIES	WEBSITE
GEORGANTZINOS Stelios	Lab for Advanced Structures and Smart Systems	3D/4D Printing, Smart materials and structures, Simulation, FEM, Composites	Develoment of methods for the anaysis, design and manufacturing of advanced materials and structures	FDM and SLA Technology 3D Printers, Testing Machines, Computer Lab, Equipment for electro/mechanical measurments, microscopes etc.	sgeorgantzinos.webnode.gr
KOUMBOULIS Fotis	Robotics and Autonmation Laboratory	Robotics and Industrial Automation	Multivariable Control, Robot control, Industrial Control, Robust Control, Switching Control, Cyberphysical Systems, Supervisory Control	Computer Workstations, Simulators, Motion Control Experiments	https://www.core.uoa.gr/tmima/prosopiko/meli_didaktikoy_ereyniti koy_prosopikoy_dep/kathigites_protis_bathmidas/fotis_n_koumboulis/
EMIRIS Ioannis	Laboratory of Algebraic and Geometric Algorithms http://erga.di.uoa.gr/	Scientific computing. Algorithms. Data science. Machine Learning.	My group has a strong international component and a strong background in Scientific computing with emphasis on Geometric and Algebraic Algorithms, Discrete Optimization, and the corresponding software development. More recently we have moved into Data science (search, mining, clustering, dimensionality reduction) with applications in CAD and Bioinformatics. Recently, we have also expanded into unsupervized and supervized Machine Learning, with a focus on Neural networks and AI for industrial problems in forecasting and optimization.	Group of young researchers and postdocs, with strong international collaborations (esp. INRIA France, as well as USA) and EU funding (3 MSCA projects). Hardware infrastructure, office space.	http://cgi.di.uoa.gr/~emiris/
GUNOPULOS Dimitrios	KDDLAB	Data Mining, Machine Learning, Databases	Research in analysis of GPS trajectories, Web Mining	Lab space, computing equipment	kddlab.di.uoa.gr
PANAGAKIS Yannis		Machine Learning, Tensor Methods, Signal Processing, Computer Vision, Computational Optimization, Computational Creativity	My research interests lie in both theoretical and applied aspects of machine learning and its interface with signal processing, high-dimensional statistics, and computational optimization. Specifically, I am working on computational models and learning algorithms that are able to sense, interpret, and understand the environment, humans, and their interactions directly from observed data conveying acoustic, visual, affective, and social information.	The department of Informatics and Telecommunications is equipped with state of the art computational facilities including GPU servers.	https://scholar.google.co.uk/citations?user=z1bkjU8AAAAJ&hl=el
NIKOLOPOULOS Iason	Environmental Physics	Energy Poverty	Energy consumption in buildings	Buildings' materials lab, computer lab.	https://www.uoa.gr/

UNIVERSITÉ LIBRE DE BRUXELLES - Belgium				contact person: Emily Mainetti ulb-europe@ulb.be	
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Alessandro Parente	Ecole Polytechnique - ATM/BURN	CFD, Combustion, Data-driven Modelling, Machine learning, New-energy carriers, New fuels, Reacting flows, Reduced-order modelling, Uncertainty Quantification.	My research activity is centered around the development of advanced combustion technologies, that can ensure a flexible, efficient and non-polluting conversion of a variety of energy sources, in particular carbon-free and CO2-neutral energy vectors. The complexity of these low-emission technologies requires the careful investigation of turbulent-chemistry interactions, the development of reduced-order models to accelerate numerical simulations, the assessment of non-conventional fuels potential, and the quantification of uncertainties in models and experiments. I am recently developing more and more research in data-driven modelling for a variety of applications, including atmospheric flows, combustion and engineering problems in general.	Experimental facilities: internal combustion engine and furnace (implementing new combustion modes) for the analysis of new energy carriers using advanced diagnostics (laser-based and probe-based). Computing facilities: The ATM department disposes of a computational infrastructure, which consists of a 2000 cores cluster connected via an Omni-Path network. In particular, a large-memory cluster branch has been recently developed, equipped with 3 Intel Xeon Silver 4114 nodes (20 cores at 2.2 Ghz each), two with 512GB or RAM and 1TB of RAM, specifically designed for the analysis of big data sets, and the development of machine learning tools	http://burn-research.be
Marco Dorigo	CoDE - Computer and Decision Engineering - IRIDIA	Swarm robotics, multi-robot systems, distributed robotics, swarm intelligence, security in distributed systems	We study cooperation and coordination in large groups of robots. We work both in simulation and with real robots. Our research is multidisciplinary (computer science, robotics, engineering, biology).	We have available for our researcher around 200 robots autonomous robots (both ground robots and drones), two arenas for experimental activities, a simulation framework (ARGoS) specific for multi-robot systems and a computational cluster with more than 1000 cores for simulations.	http://iridia.ulb.ac.be/~mdorigo/
Bernardo Innocenti	BEAMS Department - Biomed	Biomechanics	I have been working in the field of knee orthopaedic biomechanics from more than 15 years. During my entire career I have been involved in several research projects that, applying experimental and computational methodologies, alone or together, investigate the kinematics and the kinetics of the human knee joint, in healthy or pathologic conditions and, also, with a prosthesis. The analysis of the musculoskeletal loading in healthy and pathological subjects, the stress distribution in bone and in implant, and the study of prosthesis design, together with the simulation of bone remodelling and implant wear, are also additional field in which I have been involved.	The Biomechanics Laboratory, at Campus Solbosh, consists in both numerical and experimental equipment. Several advanced, hi-level, computers are available with dedicated, state of the art software for performing CAD modelling, 3D reconstruction software, finite element and imaging analysis. Moreover, post-processing software for data analysis and managing are also available From an experimental test point of view, the laboratory is equipped with: - A high-precision tensile test machine (LS1, Lloyd Instruments Ltd, West Sussex, UK), able to apply a controlled displacement or force with an accuracy of +/- 0.05% load accuracy from 1% to 100% of load cell value. The device is coupled with four load cells with a high range of force (from 1N to 1 kN). - A stereo-photogrammetric system (Optitrack) composed of 10 cameras. Such system allows to record and measure the kinematics of the knee joint (tibio-femoral and patella-femoral) during the investigated activity. - A contact pressure measurement device (TekScan reader and sensors). Such tools Enable, during the investigated activities, the analysis of knee contact pressure, area and force both for the tibio-femoral joint and also for the patella-femoral joint. - a kinematic frame able to position correctly specimens couppled with a motor enabling the application of a controlled force.	http://cvchercheurs.ulb.ac.be/Site/unite/ULB827UK.php
Bruylants Gilles	Ecole Polytechnique - Engineering of	Nanomaterials functionalization	We are focusing on is the functionalization of metal nanoparticles with organic or biological ligands in order to develop (bio)sensors and biomedical applications.	see http://emns.ulb.be/nanomaterials.html	http://emns.ulb.be/nanomaterials.html

	Molecular NanoSystems				
Hennie Valkenier-van Dijk	Ecole Polytechnique - Engineering of Molecular NanoSystems	Supramolecular Chemistry	We synthesise organic compounds that are designed to act as receptors for anions (or cations) and that can transport these ions through lipid bilayers. We study these transmembrane transport processes in model membrane (liposomes) by various spectroscopic methods (fluorescence, NMR) and seek to understand the mechanisms of transport and the parameters that affect this process.	Organic synthesis lab, liposomes preparation and characterisation, spectrometers	https://emns.ulb.be/

SAPIENZA UNIVERSITY OF ROME - Italy				contact person: rosa.distefano@uniroma1.it	
SUPERVISOR	RESEARCH LAB/GROUP	AREA OF EXPERTISE	LINES OF INVESTIGATION	KEY FACILITIES	WEBSITE
Daniela Boldini		Geotechnical Engineering and Rock Mechanics for Cultural Heritage preservation	Analysis of exposure and vulnerability of cultural heritage sites to geo-hazards; implementation of geological-geotechnical-structural models for the investigation of complex soil-structure interaction phenomena under both static and dynamic conditions; development of constitutive models for rock degradation and weathering; use of Earth Observation data for monitoring the deformative patterns and their evolution in time	Personal computer with FE codes	http://danielaboldini.site.uniroma1.it/
Domenico Borello	Numerical&Experimental Analysis of Energy Systems	Multi-phase Computational Thermo-Fluid Dynamics, Fuel cells, Biomass conversion	CFD study of Multi-phase flows in Fluid Machinery and Heat Exchanger, Development and testing of new concepts for PEM membranes and systems, Experimental assessment of biomass pyrolysis/gasification	Fluent, COMSOL and in-house code for CFD studies, Supercomputer, Fuel Cells Lab, Biomass conversion Lab	http://dima.uniroma1.it
Antonio d'Alessandro	Optoelettronica	Optoelectronic integrated devices for optical communications and optical sensor systems.	Design, fabrication and characterization of photonic devices with low power consumptions based on organic materials.	Optoelectronic laboratory with optical benches, laser sources, photodetectors and fiber optical devices. Optical spectrum analyzers , power meters, nanopositioning stages.	http://antoniodalessandro.site.uniroma1.it
Zaccaria Del Prete	Mechanical Measurements Lab; Tissue Biomechanics and Engineering Lab	Advanced industrial measurements; Measurements for Biomedical Engineering; Experiments in Tissue Biomechanics and Engineering	In the Industrial Measurements field we are currently working on: - Development of specific instrumentation and measurement protocols for Cultural Heritage - Characterization and real-time monitoring of energy production systems (catalytic converters) and the use of hydrogen (fuel cells). - Development of benches for function monitoring and incipient fault detection of ions and lithium polymer batteries. In the Biomedical and Tissue Engineering field we are currently working on: - Development of lab methods and experimental protocols for ex-vivo and in-vivo characterization of connective tissue, bones and transgenic muscle in murine models. - Development of a muscle engineered tissue (X-MET), grown in-vitro. - Characterization of optoelectronic systems and force platforms for the analysis of human kinematics and kinetics. - Use and adaptation of robotic devices for the study of motor control in healthy or pathological subjects.	The research group works between two fully equipped laboratories: the Mechanical & Thermal Lab at the Engineering School and the Tissue & Biomechanics Lab at the Medical School. The Mechanical Measurements Lab includes 14 computer stations, 7 workbenches, a welding station and 2 benches under extractor hood. The instrumentation for basic and for specific applications includes fundamental equipment for all mechanical measurements plus bench power supplies, signal generators, multimeters, digital oscilloscopes, sensors for measuring temperature (thermocouple, PT100, etc.), an Inspire 3D printer S250. For Energy Systems measurements: 4-channel Micro Gas Chromatograph, Power-train "tank-to-wheel" fully instrumented with catalytic reformer and PEM fuel cell for global efficiency measure. Thermal imaging camera, FLIR, bench with power supply and electronic load for measuring the efficiency of lithium batteries. The Tissue and Biomechanics Lab includes instruments dedicated to biomechanics, cell culturing, biological and molecular analysis: 2 Aurora Scientific Inc. force/length actuator/transducer 300B, 1 Aurora Scientific Inc. force/length actuator/transducer 305C-LR, 5 ASI 701B pulse stimulators, 1 Vision IsoStation (Newport) vibration isolation workstations with Faraday Cage, 2 high frequency CMOS camera (Basler acA2040-180km) for image acquisition and Digital Image Correlation, 2 stereo-microscopes (NIKON SMZ- 800) dedicated for the cameras, 1 signal conditioner VISHAY 2110 chassis with eight 2120 modules, 1 signal conditioner VISHAY 2110 chassis with four 2120 modules, 1 Nikon DS-Fi2 camera for cell imaging, 4 PC equipped with National Instruments data acquisition board (NI PCIe-6353), 1 vertical shakers (4809 Bruel and Kjaer), 1 power amplifier (Kepko BOP 20-10M), 2	http://www.dima.uniroma1.it/dima/en/research/mechanical-and-thermal-measurements

				piezoelectric charge accelerometers (Bruel and Kjaer), 1 charge amplifier (Bruel and Kjaer), 2 linear actuators (Zaber NA11B16-T4), 1 biaxial controller (Zaber X-MCB2), 3 stereomicroscopes, 1 chemical hood, Many commonly used tools (i.e. magnetic stirrer, mini-centrifuge, pH-meter, vortex, etc.), a culture room equipped with all the instruments necessary for cell maintenance and treatment.	
Marco Fasolo	Laboratorio di Innovazione per il rilevamento, la rappresentazione e l'analisi dell'architettura - LIRALab	Descriptive Geometry	Marco Fasolo is Coordinator of Research Unit 'Descriptive Geometry'. The research unit 'Descriptive Geometry' was created in 2011 and set up with the aim of promoting the renewal of the studies, the research and the teaching of Descriptive Geometry and its applications. This renewal arises from the development and application of the information technology to the classic themes of descriptive and projective geometry, as perspective, photogrammetry, the description of surfaces and their properties. It also concerns the study of the history of descriptive geometry, including its remote origins, the achievements from the Renaissance to the Industrial Revolution, the developments in the Contemporary Age, and therefore not limited to Gaspard Monge and his school. The results of the Research Unit's activities can be seen at: http://www.descriptivegeometry.eu The Research Unit is based in Rome, via di Ripetta, 123.	Laboratory of Innovation for architectural monitoring, representation and analysis - LIRALab. Laboratory of Architecture and Environment Design Laboratory of Visual and Digital Studies in Architecture – VISUALAB Historical Architecture and Restoration - Materials Laboratory - AStRe-LabMat.. Library of the Department of History, Representation and Restoration of Architecture Archives of Designs and Photographies For more details please refer to the department's website https://web.uniroma1.it/dsdra/	http://www.descriptivegeometry.eu
Fabrizio Frezza	Laboratory of Electromagnetic Fields II	Electromagnetics, Microwaves, Optics	Waveguides, antennas, electromagnetic resonators; mathematical and numerical methods; electromagnetic scattering, optics, free electromagnetic propagation, anisotropic materials, artificial materials and metamaterials, plasmonics, biomedical applications, cultural-heritage and environmental applications, artificial-intelligence applications to sensing and diagnostics, magnetic-resonance applications, electrical transmission lines, electromagnetic compatibility, spectroscopy, terahertz applications, thermonuclear-plasma heating; technology transfer; history of science and technology.	PNA Agilent E8363B (10 MHz-40 GHz), with time-domain option, calibration kit for rectangular waveguide WR-90 (8.2-12.4 GHz) Agilent X11644A, electronic calibration kit Agilent N4691B (3.5 mm, 300 kHz - 26.5 GHz). Vector network analyzer, model HP8530A, suitable for antennas measurements. Portable field meters PMM 8053A (with probes EP330, EP33M, EHP50C) and Wandel & Goltermann EMR 300 (with probe Type 18), covering the whole band 5 Hz - 3 GHz. Mixed analog-digital oscilloscope Tektronics MSO 2012. Agilent 85071E, software for measuring the dielectric properties of materials. Keysight N1501A Dielectric Probe Kit 10 MHz to 50 GHz. Comsol Multiphysics, with RF, AC/DC, optical, acoustic modules. Mathematica Personal Grid. MatLab. Intel Visual Fortran with IMSL Numerical Library. Ansys HFSS, Designer. CST Studio Suite. FEKO. LabVIEW. Radar GPR GSSI (Geophysical Survey Systems, Inc.) SIR 2000 with an antenna Radar Team SUB-ECHO HBD 300. Indoor and outdoor experimental facilities for underground measurements (at Cisterna di Latina site). Shielded anechoic chamber Emerson&Cuming with automatic positioning system for antenna measurements.	https://www.researchgate.net/profile/Fabrizio_Frezza
Fabio Galasso	Perception and Intelligence Lab (PINLab)	Artificial Intelligence, Computer Vision, Machine Learning	The PINLab pursues fundamental research and innovation transfer in computer vision and machine learning. Our specific research interests include distributed and multi-agent intelligent systems, perception (detection, recognition, re-identification, forecasting) and general intelligence (reasoning, meta-learning, domain adaptation), within sustainable (low-power-consumption and constrained-computational-resource sensors and devices) and interpretable (interpretable and verifiable AI) frameworks.	Computational cluster (CPU and GPU), Event-based cameras	https://fgalasso.bitbucket.io/

Alberto Giacomello	Nanocafe - Computational Atomistic Fluid-dynamics & Engineering	Nanoscale and interfacial fluid mechanics	Nanocafe is a young and multidisciplinary research group working on theory and simulation of nanoconfined fluids. Our approach is a physical one, addressing problems in engineering and biology. In particular, we use molecular dynamics and multiscale simulations which address the various time and length scales typical of wetting, cavitation, and biological phenomena with applications in clean energy and water purification.	Computational resources	https://sites.google.com/uniroma1.it/nanocafe
Fabio Giulii Capponi		Electrical Machines, Electric Drives, Power Electronics	Design of axial flux PM machines, Traction motors for Electric and Hybrid Vehicles, Digital control of drives, Power electronic converters connected to the grid, Energy conversion from Renewables	Three test benches up to 150 kW, five low-power (1 kW) test benches for experimental evalution of control algorithms, 50 kVA grid emulator, etc.	
Alfonso Ippolito	LIRALab - Innovation Laboratory for the detection, representation and analysis of architecture	Architecture - Survey - Scanner Laser 3D - SfM - Numerical Models - Matematical Models-	Innovative survey methodologies and techniques, modelling and methodologies of representation. Works on and with new surveying techniques taking advantage of the 3D laser, both of short and long range, on the elaboration of data, on the successive modelling of surface from point clouds, on the optimization of the latter in relation to architectural and archaeological surveying and in relation to designing. Works actively on the problems concerning protoptyping, managing and optimizing surveying procedures.	LIRALab carries out research activities in the field of advanced technologies for surveying (3D scanning, photo modeling, image matching) and traditional (photogrammetry and instrumental detection) and for digital and traditional representation. It carries out research activities in the field of documentation and image processing. It carries out activities in the field of interactive three-dimensional modeling. It carries out activities in the field of cartography and Geographic Information Systems (GIS). Finally, it carries out activities in the field of reverse modelling, prototyping and 3D printing.	https://web.uniroma1.it/dsdra/en
Fabio Lanfranchi	Laboratorio di Disegno dell'Architettura e dell'Ambiente	The activities carried out within the Laboratory are substantially those relating to general research in the field of Drawing with particular regard to issues relating to integrated architectural survey in addition to those relating to the representation of architecture and the city.	The main activities of the Laboratory are: problems of virtual and multimedia representation; documentation of the anthropized territory, as well as architecture. The activity of the Laboratory is aimed at an increasingly effective integration of the theoretical and instrumental traditions with current technologies which - already for some time profitably inserted and verified also in the methodological and operational aspects - characterize the research lines. As regards the field of integrated survey, to be understood in the architectural and archaeological sectors, the use of 3D laser scanner instruments, the management, processing and modeling of the resulting models, and the use of acquisition techniques based on digital photogrammetry - especially applied to the scale of detail - the constant research and experimentation aimed at identifying methodological procedures useful for the possible finalization also in the application / operational context of the results. As regards the representation of architecture, the research lines have focused on the study of the project design to be understood as a means, tool and language of conception and transmission of the design intent. Among the topics covered, studies on interpretative analysis conducted through geometry, those relating to the codes of representation and representative methods.	Hardware features include an HP Z840 Work Station, an Hp Z600, a FUJITSU Celsius R670-2 and various PCs; an HP Design Jet 5550 plotter; a Minolta CM 508I spectrophotometer; a Leica TC 703 total station; a FARO Focus 3D S120 laser scanner; a Canon EOS 40D digital camera and two Network Attached Storage (NAS). Volume licensing software dedicated to productivity (Microsoft Office Package), to the management of point clouds (JRC 3D Recostructor), to the management of digital photogrammetry (3D Zephyr). The laboratory also has a teaching room with 6 workstations.	https://web.uniroma1.it/dsdra/laboratori
Daniele Nardi	Artificial Intelligence and Robotics	Cognitive Robotics, Human-Robot Interaction, Reinforcement Learning, Cooperation in Multi-Robot Systems	The research in this area is at the intersection between Artificial Intelligence and Robotics, and has its roots in the early AI research that targeted robots as embodiments of the intelligent agent. The research group builds on the experience acquired through robotic competitions in the context of RoboCup, started back in 1998, not only	Several robots including, Pepper, NAO, DJI Matrix 100, Youbot, and several mobile platforms built using the open hw design MARRtino	http://www.dis.uniroma1.it/nardi

			in robot soccer, but also in Rescue, @Home and @Work competitions. The key scientific challenge, which has received a significant push by the recent developments in sensor technology and robotics, is the ability to deal with manifold representations of knowledge that enable robots to perform complex tasks in a dynamic, unknown environment populated by other (robotic and human) agents. One section of the work aims at analizing perceptual data to create a rich world model, through the interpretation of sensor data and/or data coming from other information sources, including spoken language understanding. Another section of the research aims at developing various types of inference to support the actions of the robot in the environment, in particular within social contexts and in the interaction with the user. Both perception and action are often addressed in scenarios where multiple agents cooperate both in distributed perception and in task execution. Specific application domains are robots in smart cities and agriculture robotics.		
Francesco Napolitano	Research group in hydrology, Hydraulic and Maritime Constructions	Watershed hydrological models, hydraulic risk management, planning and management of hydraulic infrastructures	Implementation of watershed hydrological models (stochastic, conceptual, physically-based) to identify hydrological forces in case of internal or external changes. Hydrological risk management through the implementation of structural and non-structural measures, planning and resilient management of hydraulic infrastructures.	Laboratory of hydraulic constructions. Numerical laboratory of computational hydrology. National and International scientific collaborations (NTUA - Athens, Greece - Iowa University, USA)	https://www.dicea.uniroma1.it/user/145/
Annamaria Pau		Structural Engineering, Mechanics, Modelling, Wave Propagation in Solids, Damage Detection, Ultrasonic Imaging, Load Identification	wave propagation in prestressed and prestrained continua; modelling materials with microstructure; ultrasonic image reconstruction of defects in plates; localization and identification of damage; identification of travelling loada	calculus resources	https://sites.google.com/a/uniroma1.it/annamariapau/
Francesco Petrini	Structural analysis and Design	Structures, Heritage, Climate, Environment, Energy	My research group is currently working on two main research topics: 1. Performance-Based Design under Multiple Hazards a. Performance-Based Wind Engineering (PBWE) b. Performance-Based Earthquake Engineering (PBEE) c. Performance-Based Blast Engineering (PBBE) d. Performance-Based Fire Engineering (PBFE) e. Performance-Based Multi-Hazard Engineering (PB-MHE) 2. Energy Harvesting f. Macro(urban)-Scale EH (Wind Turbines Modeling and Design) g. Meso(building)-Scale EH (Devices for simultaneous EH and Vibration Control in High-Rise Buildings) h. Micro(sensors)-Scale EH (Devices for self-powered wireless sensors) Concerning the applications/case studies available or of interest for the research group, they are (but are not limited to): Heritage Buildings, Tall Buildings (in steel or composite), Wind Turbines, Bridges, Concrete or Steel ordinary buildings, Dams.	The High Performance Computing facility at Sapienza University is a world-class facility. It is maintained and serviced by the University's IT Service Desk to manage any incidents or problems. Since Sapienza University's Finance Services have great experiences of managing European project grants, financial and budget-related tasks will be appropriately performed.	https://sites.google.com/a/uniroma1.it/francescopetrini-eng/home

Chiara Petrioli	SENSES	IoT, wireless and mobile computing, networked systems	Underwater Internet of Things, low power or zero power IoT systems, green wireless networks (leveraging energy harvesting), IoT systems based on visible light communications	Underwater robots, sensors, modems; Prototypes of VLC platforms; Testbed with IoT equipped with wake up radio; Workstations for simulations; In addition we leverage on equipment at department level (the Computer Science department is a department of excellence).These equipments include a cluster of high performance machines, drones, videocameras, 3D printers, IoT testbeds.	http://senseslab.di.uniroma1.it
Cristina Piccioni	Transport systems Area	Public transit, urban mobility, parking management, freight transport and logistics	Accessibility to infrastructure and services for sustainable mobility, rail-based systems and urban environments, electric vehicles for private transport: new trends and users' attitude	Computers, printers, software for transport planning	https://www.dicea.uniroma1.it/users/cristianapiccioniuniroma1it
Stefano Ricci		Rail and maritime transportation engineering	Infrastructures and railway operation, navigation and port terminals	Static test bench for vehicle-railway infrastructure interaction, railway traffic simulator, intermodal terminals, calculation models for the operational capacity of lines and plants	http://stefanoricci.site.uniroma1.it/
Emanuele Rodolà	Geometric & Visual Computing	geometry processing; computer vision; deep learning	We pursue two main lines of research, supported by ERC funds for which I act as the PI. 1) Geometric deep learning applied to frontier problems in computer vision, graphics, computational biology and other disciplines; 2) Spectral shape analysis and geometry processing, most recently the adoption of eigenvalues as a powerful proxy to the surface metric.	We have a big GPU/CPU cluster, shared within the Department, for running intensive deep learning simulations. Other devices such as VR, depth cameras, or brain-computer interfaces are also available.	
Carlo Tacconelli	DIMA –Department of Mechanical and Aerospace Engineering	Off-grid renewable energy systems	Decentralized solutions for energy access in developing countries	Research group composed of 5 people.	
Enrico Tronci	Model Checking Lab	Formal Verification of Cyber Physical Systems, Systems Biology, In Silico Clinical Trials	Development of simulation based algorithms and software tools for automatic analysis of Hybrid Systems (HS). The main focus is on HS modelling CPS (Cyber Physical Systems), Self-Adaptive Software Systems (SAS), biological systems (Systems Biology), human physiology (Virtual Physiological Human, VPH). The main application areas are: formal verification and automated design of safety/mission critical CPS; In Silico Clinical Trials to support simulation based safety/efficacy assessment of drugs and therapies.	Computer Cluster	http://mclab.di.uniroma1.it
Stefano Vidoli	Dipartimento di Ingegneria Strutturale e Geotecnica	Mechanics of solids, Structural mechanics, Shell	Multistable structures: design, modelling and actuation of morphing shells Variational fracture mechanics: interaction of damage and plasticity, gradient-damage models under compressive loads	Computational cluster, Structural Mechanics Lab (for more details see https://web.uniroma1.it/disg/en/facilities)	https://sites.google.com/a/uniroma1.it/stefanovidoli/attivita?authuser=0

STOCKHOLM UNIVERSITY - Sweden				contact person: henrik.aspeborg@su.se	
SUPERVISOR	RESEARCH LAB/GROUP	AREA OF EXPERTISE	LINES OF INVESTIGATION	KEY FACILITIES	WEBSITE
Jalal Nouri	The learning analytics and AI for education group, Department of Computer and System Sciences	Learning analytics and AI for education	We are investigating how learning analytics and AI can be utilized to support data-driven education, create adaptive learning environments and for the optimization of learning and teaching environments.	We have a research group that consists of around 14 senior researchers and PhD students. We have two big research project grants (one from VR and one from Ifous) that the candidate could work within. We are hosting the international journal of learning analytics and AI for education. Swedens only research group with focus on learning analytics and AI for education. We have good national and international networks and collaborations.	https://learninganalytics.blogs.dsv.su.se/sample-page/
Jelena Zdravkovic	BPM & EM & RE, Department of Computer and Systems Sciences https://dsv.su.se/en/research/research-areas/bpm	Requirements Engineering	I am Professor in departments Enterprise Modeling research group with a focus on Requirements Engineering. The group involves around 10 researchers – seniors and PhD students. I have been for several years doing research in Requirements Engineering, capability and consumer oriented. My latest interest includes digital data-driven Requirements Engineering, as well as development and analysis of Digital Business Ecosystems for increased automation and with support of AI.	Facilities are very good – they include nice and quite working places, labs, as well as rooms and facilities of different kind.	https://jelena.blogs.dsv.su.se/
Teresa Cerratto Pargman	TEL research area and in particular the critical computing group, Department of Computer and System Sciences	Educational technology, Technology Enhanced learning, Learning Sciences, AI in Education, Digitalization, Education and Sustainability	Critical computing brings together a group of people interested in the increasing digitalization of everyday practices as well as the opportunities and challenges that this process brings to epistemic and social practices. By putting a focus on the relationships that unfold between humans and digital technologies we explore how the design of such technologies both reflects and configures social practices, and how in turn the use shapes and contributes to the design of digital technologies. The intellectual challenge that unites and organises our work is that of developing a critical lens on computing, and particularly in the areas of Educational Technology, and Human-computer interaction.	Rooms, computer, printer, nice people.	https://teresacerrattopargman.blogs.dsv.su.se/research-projects/