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<b>SCIENTIFIC SUPERVISOR</b>	
<b>Name and Surname</b>	Josip Peranić
<b>UNIRI Faculty</b>	<a href="#">Faculty of Civil Engineering</a>
<b>Organisational Unit / Research Group</b>	Department of Hydrotechnics and Geotechnics / Chair of Geotechnics
<b>Research Team</b>	<p><a href="#">Full Professor Željko Arbanas, PhD</a> Chair of Geotechnics</p> <p><a href="#">Assistant Professor Martina Vivoda Prodan, PhD</a> Chair of Geotechnics</p> <p><a href="#">Assistant Professor Nina Čeh, PhD</a> Chair of Engineering Mechanics</p> <p>Juraj Stella, Technician Geotechnical Laboratory</p>
<b>EU-funded project experience</b>	Interreg project ITHR0200175 RESONANCE: impRoving landslidE riSk preventiOn aNd mAnagement iN Coastal arEas (co-funded by the EU)
<b>Research Interests</b>	My research focuses on rainfall-induced landslides and unsaturated soils. Our laboratory and expertise offer MSCA postdocs a wide range of opportunities related to these topics. These include equipment for advanced hydraulic and mechanical characterisation of soils under saturated and unsaturated conditions, tests on small-scale slopes equipped with sensors for pore water pressure and soil moisture under simulated rainfall, numerical modelling of transient infiltration and slope stability, etc.
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<b>SCIENTIFIC SUPERVISOR</b>	
<b>Name and Surname</b>	Nino Krvavica
<b>UNIRI Faculty</b>	<a href="#">Faculty of Civil Engineering</a>
<b>Organisational Unit / Research Group</b>	Department for Hydrological Engineering
<b>Research Team</b>	<p>Research Team consists of researcher from Faculty of Civil Engineering, but also other faculties at the University of Rijeka, and other institutions.</p> <ul style="list-style-type: none"> <li>• <a href="#">Nino Krvavica</a> (supervisor, University of Rijeka, Faculty of Civil Engineering) – expert in numerical modelling in coastal engineering and hydrological engineering</li> <li>• <a href="#">Igor Ružić</a> (University of Rijeka, Faculty of Civil Engineering) – expert in remote sensing in coastal engineering</li> <li>• <a href="#">Marta Marija Bilić</a> (PhD student, University of Rijeka, Faculty of Civil Engineering) – researching numerical modelling of compound flooding</li> <li>• <a href="#">Jonatan Lerga</a> (University of Rijeka, Center for Artificial Intelligence and Cybersecurity) – expert in machine learning and signal processing</li> <li>• <a href="#">Suzana Ilić</a> (Lancaster University) – expert in ocean dynamics and coastal processes</li> <li>• Goran Lončar (University of Zagreb) – expert in numerical modelling in hydraulic engineering</li> </ul> <p>Research team has received funding from the Croatian Science Foundation for the project “Compound Flooding in Coastal Croatia under present and future climate - <a href="#">4SEAFLOOD</a> (2023 -2027)”.</p>
<b>EU-funded project experience</b>	<ul style="list-style-type: none"> <li>• 2021 - 2023: Strategic development of flood management (STREAM), expert in pluvial floods and coastal floods (team leader), Interreg Italy-Croatia,</li> </ul>

	<p>European Regional Development Fund, (<a href="https://www.italy-croatia.eu/web/stream">https://www.italy-croatia.eu/web/stream</a>).</p> <ul style="list-style-type: none"> <li>• 2014 - 2023: Water and Environmental Monitoring, Analysis, and Solutions (VEPAR), expert in the Study of sea flood risk management, European Regional Development Fund (ERDF), OPKK, (<a href="https://vepar.voda.hr/">https://vepar.voda.hr/</a>).</li> <li>• 2019 - 2021: Resilience information platform for Adriatic cities and towns (ADRIADAPT), expert in modeling hydrological processes in coastal areas, Interreg Italy-Croatia, European Regional Development Fund, (<a href="https://adriadapt.eu/">https://adriadapt.eu/</a>).</li> <li>• 2013 - 2016: Networking for Drinking Water Supply in Adriatic Region – DRINKADRIA, collaborator, IPA Adriatic Cross Border Cooperation.</li> </ul>
<b>Research Interests</b>	<p>Research interests are focused on compound flooding in coastal regions. We will quantify the current and future compound flooding potential along the Croatian coast, analyse and map compound flooding hazards in selected pilot areas, and increase the overall knowledge about the mechanisms of compound flooding. Our research team welcomes qualified and skilled postdocs with experience in numerical modelling of oceanographic and hydrological extreme events, machine learning, as well as statistical analysis.</p>
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<b>SCIENTIFIC SUPERVISOR</b>	
<b>Name and Surname</b>	Teo Mudrić

<b>UNIRI Faculty</b>	<a href="#">Faculty of Civil Engineering in Rijeka</a>
<b>Organisational Unit / Research Group</b>	Engineering mechanics
<b>Research Team</b>	<p>I am working within a research team at the Chair of engineering mechanics, Faculty of Civil Engineering in Rijeka. The research interests described below are related primarily to myself, while the team research interests are much wider. Nonetheless, it is worth mentioning that two other research team members have experience in contact mechanics, namely Nina Čeh and Gordan Jelenić.</p> <p>Research team:</p> <ul style="list-style-type: none"> <li>• <a href="#">Nina Čeh</a></li> <li>• <a href="#">Gordan Jelenić</a></li> <li>• <a href="#">Leo Škec</a></li> <li>• <a href="#">Edita Papa Dukić</a></li> <li>• <a href="#">Sara Grbčić Erdelj</a></li> <li>• <a href="#">Dragan Ribarić</a></li> </ul>
<b>EU-funded project experience</b>	Co-worker on the EU-funded project “Joint Training on Numerical Modelling of Highly Flexible Structures for Industrial Applications (THREAD)”, from 2019 to 2024.
<b>Research Interests</b>	<p>Peridynamics modelling of solid mechanics problems. In particular, deformation of solid bodies including cracks initiation and propagation.</p> <p>Coupling of peridynamics non-local theory with the standard or local continuum theory of solid body mechanics. Coupling between numerical procedures for local continuum theory and peridynamics theory, e.g. FEM and peridynamics.</p> <p>Contact mechanics modelling of mechanical systems, involving application to real life engineering problems and investigation of numerical solution procedures (e.g. time integration, algorithms).</p>
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<b>SCIENTIFIC SUPERVISOR</b>	
<b>Name and Surname</b>	Gordan Jelenić
<b>UNIRI Faculty</b>	<a href="#">Civil Engineering</a>
<b>Organisational Unit / Research Group</b>	Chair of Engineering Mechanics
<b>Research Team</b>	<p>The research group involves seven members of the academic staff (Gordan Jelenić, Dragan Ribarić, Edita Papa Dukić, Leo Škec, Nina Čeh, Teo Mudrić, Sara Grbčić Erdelj), and four research-contract staff working on fixed-term research projects. Among other fields, research is being conducted in structural analysis of highly flexible slender structures (<a href="https://thread-etn.eu/">https://thread-etn.eu/</a>), Cosserats' continuum mechanics (<a href="https://fimcos.gradri.uniri.hr/">https://fimcos.gradri.uniri.hr/</a>), and spatial/temporal discretisation on non-linear manifolds (<a href="https://canfas.gradri.uniri.hr/">https://canfas.gradri.uniri.hr/</a>). The research group has been supported in the past fifteen years from a number of competitive international and national funding sources as well as national and university research grants in the total value of cca €1M. The group has collaborated with academic institutions in Slovenia, Great Britain, Italy, Spain, Finland, Germany, France, Ireland, Belgium, Austria and China.</p> <p>Particular emphasis is given to the interconnection between theory, numerical analysis and experimental research, for which the following equipment is provided:</p> <ul style="list-style-type: none"> <li>- Zwick Z 600E 600 kN universal compression/tension/bending testing machine</li> <li>- GOM Aramis/Pontos optical system involving two high-speed cameras and software for contactless measurement</li> <li>- National Instruments acquisition system including LabVIEW software</li> </ul>

	<ul style="list-style-type: none"> <li>- Quanser I-40 and two Quanser III bi-axial shake tables with LabVIEW and Matlab software support</li> <li>- FEAP source code</li> <li>- Intel Fortran, Wolfram Mathematica and Mathworks Matlab programming environments</li> </ul> <p>The prospective candidate should have the background in engineering, physics or mathematics and possess strong interest and broad knowledge of mechanics firmly grounded in fundamental physical principles with more specific expertise in one of the areas of interest of the supervisor, possibly acquired during Ph.D. studies. Additional expertise in programming (Wolfram Mathematica, MathWorks Matlab, Python, Fortran, LabVIEW) particularly welcome.</p>
<b>EU-funded project experience</b>	<p>Joint training on numerical modelling of highly flexible structures for industrial applications (THREAD)  Work-package leader, UNIRI PI  Horizon 2020 MSCA ITN-ETN 2019, 1.10.2019-31.3.2024</p>
<b>Research Interests</b>	<p>Non-linear continuum mechanics,  General theory and parameter identification of Cosserats' and couple-stress continuum  (<a href="https://doi.org/10.1016/j.ijsolstr.2024.112647">https://doi.org/10.1016/j.ijsolstr.2024.112647</a>,  <a href="https://doi.org/10.1016/j.ijsolstr.2020.05.025">https://doi.org/10.1016/j.ijsolstr.2020.05.025</a>),  Geometrically exact beam theory (<a href="https://doi.org/10.1016/S0045-7825(98)00249-7">https://doi.org/10.1016/S0045-7825(98)00249-7</a>, <a href="https://doi.org/10.1098/rspa.1999.0352">https://doi.org/10.1098/rspa.1999.0352</a>),  Finite-element interpolation and time integration on Lie groups  (<a href="https://doi.org/10.1016/j.cma.2023.116665">https://doi.org/10.1016/j.cma.2023.116665</a>)</p>
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<b>UNIRI Faculty</b>	<a href="#">Faculty of Civil Engineering</a> (GRADRI)

<b>Organisational Unit / Research Group</b>	Chair of Applied Mechanics
<b>Research Team</b>	<p>University of Rijeka, Faculty of Civil Engineering:  <a href="#">Gordan Jelenić</a>,  <a href="#">Dragan Ribarić</a>,  <a href="#">Ivan Hlača</a>,  <a href="#">Damjan Jurković</a>,</p> <p><a href="#">Giulio Alfano</a>, Brunel University London, UK</p> <p><a href="#">Dejan Zupan</a>, University of Ljubljana, Faculty of Civil and Geodetic Engineering, Slovenia</p>
<b>EU-funded project experience</b>	<p><b>H2020-MSCA-IF-2015-EF</b> (Marie Skłodowska-Curie Individual Fellowships): Modelling mixed-mode rate-dependent delamination in layered structures using geometrically nonlinear beam finite elements (MOLAY-STRUDEL) – research fellow</p> <p><b>H2020-MSCA-ITN-2019</b> (Marie Skłodowska-Curie Innovative Training Networks): Joint Training on Numerical Modelling of Highly Flexible Structures for Industrial Applications (THREAD) – collaborator and PI in the subsequent project proposal</p>
<b>Research Interests</b>	Geometrically and materially non-linear mechanics of structures, composite structures, layered structures, adhesive joints, fracture mechanics, damage mechanics, cohesive-zone models, modelling crack propagation, plasticity, viscosity, fatigue, impact loads, elastic and inelastic properties of 3D printed materials (including 3D printed concrete), materials with microstructure, auxetic materials, parameter-identification algorithms, experimental mechanics, software development.
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<b>Organisational Unit / Research Group</b>	Engineering Mechanics Group
<b>Research Team</b>	<a href="#">Nina Čeh</a> , <a href="#">Teo Mudrić</a> , <a href="#">Leo Škec</a> , <a href="#">Edita Papa Dukić</a> , <a href="#">Katarina Tutić</a>
<b>EU-funded project experience</b>	MSCA - Marie Skłodowska-Curie Actions, Innovative Training Networks (ITN): THREAD - European Training Network on Highly Flexible Slender Structures for Industrial Applications (2019-2024)
<b>Research Interests</b>	Experimental (seismic platform + DIC measuring techniques), numerical (time integration algorithms, DEM, FEM), and analytical investigation of rocking motion; energy-loss mechanisms at impacts/collisions between bodies during rocking; the dynamic response of multi-block structures with cohesive contacts; experimental and numerical dynamic characterisation of discontinuous blocky structures; dynamic response and asymmetric modes in multiple support seismic excitation of long structures.
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