

## Research interests

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- Representation learning, Deep reinforcement learning, Quality-Diversity, Robotics
- Uncertainty-based efficient policy search methods

## Education

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| <b>2016 – now</b>  | <b>PhD student</b><br>Robot Intelligence Lab, Imperial College London  |
| <b>2011 – 2013</b> | <b>MSc European Master On Advanced Robotics (EMARO), double degree</b><br>Thesis development: Keio University, Japan<br>2 <sup>nd</sup> year: Ecole Centrale de Nantes, grade average A<br>1 <sup>st</sup> year: University of Genova, grade average A |
| <b>2007 – 2011</b> | <b>BSc Mechatronics, Robotics and Automatization.</b><br>Faculty of Technical Sciences, University of Novi Sad.<br>240 ECTS, grade average 10 [100/100]  |

## Employment and academic activities

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| <b>09/2018 – 01/2019</b> | <b>Research Intern: DeepMind</b> , London, UK<br>Efficient exploration for Sim2Real transfer<br>[Host: Francesco Nori]   |
| <b>(06 – 08)/2017</b>    | <b>Data Scientist: Human (previously CitySail)</b> , London, UK<br>Developing and implementing models for real-time human personality estimation.  |
| <b>01/2015 – 05/2016</b> | <b>Research Assistant: iBug group, Imperial College London</b> , UK<br>Sequential probabilistic models for emotion recognition based on facial expressions and audio data. Multimodal Neural Conditional Random Fields for Behaviour Analysis. |
| <b>2015 – now</b>        | <b>Graduate Teaching Assistant: Imperial College London</b> , UK<br>Machine Learning (prof Maja Pantic),<br>Computing II, Robotics (Dr Petar Kormushev)<br>Data Structures and Algorithms (Dr Heikki Peura)                                    |
| <b>12/2013 – 07/2014</b> | <b>Research Engineer: RIS group, LAAS-CNRS</b> , Toulouse, France<br>Rover locomotion diagnostics based on proprioceptive sensor feeds.  |
| <b>07/2013</b>           | MSc thesis testing sessions: Japanese Aerospace Exploration Agency's (JAXA) Institute of Space and Astronautical Science on the "Cuatro" rover test bed  |
| <b>2011</b>              | Team leader: National robotics competition (EUROBOT)   |
| <b>(09 – 10)/2010</b>    | <b>Intern: Mihajlo Pupin Institute</b> , Belgrade, Serbia<br>Robotic gripper and small rover movement programming.<br>[Host: Professor Aleksandar Rodić]   |

## Publications

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**N Rakicevic**, A Cully, P Kormushev. "Policy Manifold Search for Improving Diversity-based Neuroevolution", Beyond Backpropagation Workshop (NeurIPS), 2020 [**oral 8% acceptance rate**]

RP Saputra, **N Rakicevic**, D Chappell, K Wang, P Kormushev. "Hierarchical Decomposed-Objective Model Predictive Control for Autonomous Casualty Extraction", [under review], 2020

RP Saputra, **N Rakicevic**, P Kormushev. "Sim-to-Real Learning for Casualty Detection from Ground Projected Point Cloud Data", IROS, 2019

**N Rakicevic**, P Kormushev. "Active Learning via Informed Search in Movement Parameter Space for Efficient Robot Task Learning and Transfer", AURO, 2019

**N Rakicevic**, P Kormushev. "Efficient Robot Task Learning and Transfer via Informed Search in Movement Parameter Space", AIRW (NIPS), 2017

**N Rakicevic**, O Rudovic, S Petridis, M Pantic. "Multi-Modal Neural Conditional Ordinal Random Fields for Dynamic Agreement Level Classification", ICPR, 2016

**N Rakicevic**, O Rudovic, S Petridis, M Pantic. "Neural Conditional Ordinal Random Fields for Agreement Level Estimation", WASA, 2015.

## Services

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Reviewer **International Conference Learning Representations; 2021**

Reviewer **Journal of Intelligent & Robotic Systems; 2020**

Reviewer **International Conference Machine Learning; 2020 (top reviewer)**

Reviewer **NeurIPS 2019 Workshop on Robot Learning; 2019, 2020**

Reviewer **IEEE International Conference on Humanoid Robots; 2019**

Reviewer **IEEE International Conference on Robotics and Automation; 2018, 2020**

## Summer Schools

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<b>2020</b>	DAAD Postdoc-Net-AI Fellow
<b>2019</b>	Machine Learning Summer School, London, UK
<b>2017</b>	Deep Reinforcement Learning Bootcamp, Berkeley, CA

## Awards and recognitions

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<b>2016 – 2020</b>	Imperial College London President's PhD Scholarship
<b>2011 – 2013</b>	Erasmus Mundus scholarship laureate for the EMARO MSc programme
<b>2010/2011</b>	Declared best student in generation 2010/11, University of Novi Sad
<b>2010 – 2013</b>	"Dositeja" scholarship laureate, Ministry of Youth and Sport, Republic of Serbia
<b>2009/2010</b>	University of Novi Sad scholarship laureate
<b>2008 – 2012</b>	Annual award to exceptional students for their achievements during studies, Ministry of Education, Republic of Serbia

## Skills

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Computer skills	[active] Python, Tensorflow, MuJoCo, Box2D, PyBullet, LaTeX, Git [passive] MATLAB, C/C++, Solid Edge, Pro/ENGINEER
Languages	Serbian, English, Italian, Spanish, French
Hobbies	Capoeira Club "Capoeira Associação Sérvia" (since 2005), Surfing, Drawing