



# STEVO RACKOVIĆ

·Data Scientist·

·Machine Learning Expert·

## PROFESSIONAL EXPERIENCE

### Data Scientist

2023 – present

Vega IT | Novi Sad

- Research and development with applications of Large Language Models in InsurTech
- Developing an agentic pipeline for knowledge extraction from documents
- Prompt engineering

### Researcher

2019 – 2023

Institute for Systems and Robotics | Lisbon

- Research on task offloading in networks of machines
- Developing deep reinforcement learning agents in PyTorch
- Research in distributed optimization and machine learning models with applications in the animation industry

### Researcher

2018 – 2019

Faculty of Sciences | Novi Sad

- Developing models for distributed implementation of the common machine learning algorithms

### Intern

2018

BioSense Institute | Novi Sad

- Developing a classifier to accurately recognize the cultures planted in specific fields using satellite images

## EDUCATION

### PhD in Statistics and Stochastic Processes 2019 – present

Instituto Superior Tecnico | Lisbon

- The curriculum covers machine learning, optimization, and statistics with a high demand for both theoretical and practical skills
- Thesis: “Distributed optimization of bio-kinetic models based on large 4D sequences”
- Solving large-scale optimization problems in the facial animation, with the focus on a distributed optimization setting for reducing computational costs

🌐 [stevorackovic.github.io](https://stevorackovic.github.io)  
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🌐 [in/stevo-rackovic](https://in/stevo-rackovic)  
🐙 [github.com/stevorackovic](https://github.com/stevorackovic)  
📍 Novi Sad, Serbia

## TECHNICAL SKILLS

- Python with PyTorch and TensorFlow
- Microsoft Azure
- MySQL and PostgreSQL
- PowerBI
- Git

## CONCEPTUAL SKILLS

- Problem solving and critical thinking
- Machine learning and deep learning
- Data analysis
- Natural language processing and image processing
- Optimization
- Statistics

## LANGUAGES

- Serbian
- English
- Portuguese

**MSc in Applied Mathematics – Data Science**

2016 – 2018

Faculty of Sciences | Novi Sad

**BSc in Applied Mathematics – Mathematics of Finance**

2013 – 2016

Faculty of Sciences | Novi Sad

## PUBLICATIONS

- *“Clustering of the Blendshape Facial Model”*,  
S. Rackovic, C. Soares, D. Jakovetic, Z. Desnica, R. Ljubobratovic,  
2021, 29th European Signal Processing Conference (EUSIPCO)
- *“A Hybrid Compartmental Model with a Case Study of COVID-19 in Great Britain and Israel”*,  
G. Malaspina, S. Rackovic, F. Valdeira,  
2023, Journal of Mathematics in Industry
- *“Distributed Solution of the Blendshape Rig Inversion Problem”*,  
S. Rackovic, C. Soares, D. Jakovetic,  
2023, SIGGRAPH Asia 2023 Technical Communications
- *“A Majorization–Minimization-Based Method for Nonconvex Inverse Rig Problems in Facial Animation: Algorithm Derivation”*,  
S. Rackovic, C. Soares, D. Jakovetic, Z. Desnica,  
2023, Optimization Letters
- *“Refined Inverse Rigging: A Balanced Approach to High-fidelity Blendshape Animation”*,  
S. Rackovic, D. Jakovetic, C. Soares,  
2024, SIGGRAPH Asia 2024 Conference Papers
- *“PeersimGym: An Environment for Solving the Task Offloading Problem with Reinforcement Learning”*,  
F. Metelo, C. Soares, S. Rackovic, P. A. Costa,  
2024, Joint European Conference on Machine Learning and Knowledge Discovery in Databases. Cham:  
Springer Nature Switzerland
- *“Extreme Multilabel Classification for Specialist Doctor Recommendation with Implicit Feedback and Limited Patient Metadata”*,  
F. Valdeira, S. Rackovic, V. Danalachi, Q. Han, C. Soares,  
2023, arXiv preprint