

PERSONAL INFORMATION

Name: Moll, Maximilian

EDUCATION

- 2018 Postgraduate Dr.rer.nat.
Universität der Bundeswehr München
Supervisor: Prof. Stefan Pickl
- 2015 Undergraduate BA, MA, MMath Mathematics
University of Cambridge, UK
- 2007-2010 Undergraduate “programme for gifted children”
Universität der Bundeswehr München

ACADEMIC POSITIONS

- 2021 – present Juniorprofessor for Prescriptive Analytics – Operations Research
Institut für Theoretische Informatik, Mathematik und Operations Research, Universität der Bundeswehr München, Germany
- 2021 – present Leader of the working group “Simulation and Optimization of Complex Systems”,
German OR Society
- 2019 - present Research Group Leader “Data-driven Aviation Management”
Munich Aerospace
- 2018 – 2021 Post-doctoral researcher
Institut für Theoretische Informatik, Mathematik und Operations Research, Universität der Bundeswehr München, Germany

Maximilian Moll’s research focuses on reinforcement learning, one of the three areas in machine learning. Here, his particular interest is on combinations with classical methods of operations research as well as application opportunities to prescriptive analytics. The latter pushes past predictive analytics, in the sense that it not only tries to predict the future, but tries to suggest optimal actions to be taken in the present.

HIGHLIGHTED PUBLICATIONS

Moll, M., & Kunczik, L. (2019). Two Perspectives on Playing Games: Reinforcement Learning vs Game Theory. In *Proceedings on the International Conference on Artificial Intelligence (ICAI)* (pp. 60-61).

Moll, M. (2019). A competitive Analysis of a Smart Optimization Framework. *37th International Conference of the System Dynamics Society*

Moll, M. (2019). Analyzing a framework for extended policy optimization in System Dynamics Models. *Modeling Supply Chains and Industrial Dynamics: in Selected Papers on System Dynamics*

Moll, M., & Kunczik, L. (2021). Comparing quantum hybrid reinforcement learning to classical methods. *Human-Intelligent Systems Integration*, 3(1), 15-23

Germania, 28 marzo 2022

Maximilian MOLL

INFORMAZIONI PERSONALI

Nome: Moll, Maximilian

FORMAZIONE

2018	Post-laurea	Dottorato in Scienze naturali <i>Universität der Bundeswehr München</i> Relatore: Prof. Stefan Pickl
2015	Laurea	Triennale, Magistrale, Master in Matematica <i>University of Cambridge, UK</i>
2007-2010	Diploma	“programma per bambini dotati” <i>Universität der Bundeswehr München</i>

INCARICHI ACCADEMICI

2021 – oggi Ricercatore di Analisi prescrittiva – Ricerca operativa
Institut für Theoretische Informatik, Mathematik und Operations Research, Universität der Bundeswehr München, Germania

2021 – oggi Leader del gruppo di lavoro “Simulazione e Ottimizzazione dei Sistemi Complessi”,
German OR Society

2019 - oggi Leader del gruppo di ricerca “Data-driven Aviation Management”
Munich Aerospace

2018 – 2021 Ricercatore post-dottorato
Institut für Theoretische Informatik, Mathematik und Operations Research, Universität der Bundeswehr München, Germania

La ricerca di Maximilian Moll si concentra sull'apprendimento di rinforzo, una delle tre aree dell'apprendimento automatico. In quest’ambito, il suo interesse particolare è rivolto alle combinazioni con i metodi classici della ricerca operativa, nonché alle opportunità di applicazione all'analitica prescrittiva. Quest'ultima si spinge oltre l'analisi predittiva, nel senso che non cerca solo di prevedere il futuro, ma di suggerire azioni ottimali da intraprendere nel presente.

PRINCIPALI PUBBLICAZIONI

Moll, M., & Kunczik, L. (2019). Two Perspectives on Playing Games: Reinforcement Learning vs Game Theory. In *Proceedings on the International Conference on Artificial Intelligence (ICAI)* (pp. 60-61).

Moll, M. (2019). A competitive Analysis of a Smart Optimization Framework. *37th International Conference of the System Dynamics Society*

Moll, M. (2019). Analyzing a framework for extended policy optimization in System Dynamics Models. *Modeling Supply Chains and Industrial Dynamics: in Selected Papers on System Dynamics*

Moll, M., & Kunczik, L. (2021). Comparing quantum hybrid reinforcement learning to classical methods. *Human-Intelligent Systems Integration*, 3(1), 15-23

Germania, 28 marzo 2022

Maximilian MOLL