MARKUS SCHMITZ

Ready to take the next steps towards AGI

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Q Germany, Munich

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https://markusschmitz.github.io



EXPERIENCE

Specialist and Consultant for AI and ML

BMW Group

March 2021 - ongoing

Munich, Germany

- Group-wide consulting on development of ML applications
- Management of international Start-Ups in the field of Al
- Management of department-wide cloud resources (Azure and AWS)
- Machine Learning special operations team
- Workshops and training for upper Management on AI and ML

Consulting | Machine Learning | Cloud Computing

PhD studend Industrial Machine Learning **BMW Group**

May 2018 - March 2021

Munich, Germany

- Research and development on several Industrial ML Applications
- Unsupervised Anomaly Detection for logistics Ramp-Up (deployed)
- Multi-Model Quality Inspection System for Laser Welding (deployed)
- Autonomous robotic assembly using Deep Reinforcement Learning (prototype)
- Machine Teaching self-service application for Computer Vision (deployed)

Project Management

Machine Learning

Research

Research Associate

Chair of IT-Management, Friedrich-Alexander Universität

May 2018 - ongoing

♀ Germany, Nuremberg

- Dissertation "Machine Learning in Industrial Applications" (Submitted, Disputation in November)
- Yearly lecture on "Machine Learning for Business (ML4B)"
- Exercises for "Managing Projects successfully" and "Managing Tech. Change"

Research

Project Management

University Teaching

Innovation Project Management and Consulting BMW USA

May 2019 - August 2019

Q USA, Spartanburg

- Management of digitization- and innovation Projects
- Consulting on the application of AI in several projects
- Initiation of research projects with Georgia Tech University

Project Management | Consulting

Projekt Predictive Maintenance in the Brownfield (Master Thesis)

BMW Group

M Oct 2017 - April 2018

♀ Germany, Munich/Regensburg

- Development of Semi-Supervised and Unsupervised Predictive Maintenance
- Integration of ML in a production process
- Projetc management and communication with management and stakeholders

Machine Learning

Production Deployment

CERTIFICATES



Computer Vision Nanodegree

Link Certificate (Udacity)



Deep Learning Nanodegree

Link Certificate (Udacity)



Deep Reinforcement Learning Nanodegree

Link Certificate (Udacity)



Basic Consulting Skills

Internal Training



Professional Scrum Master

Link Certificate (Scrum.org)

SKILLS

Machine Learning

- Designed and developed applications with Supervised, Unsupervised and Reinforcement Learning
- Design of Machine Learning Applications in Computer Vision, Natural Language Processing and Automated Decision Making

Information Technology

- Experienced Software Developer
- Experience with managing enterprise cloud (AWS,

Projects and Consulting

- Management of ML research projects
- Consulting for several ML projects
- Experience in Agile und traditional project management
- Experience in Technology management for startup evaluation

Research

- Design Science Research
- Prototyping
- Coordinating research projects

Teaching

- Teaching AI and ML concepts to students and management
- Design und execution of management workshops und trainings

EDUCATION

Master International Information Systems Friedrich-Alexander University

m Oct 2015 - April 2018

- Software project management
- Data and Analytics
- Software architecture

Semester Abraod

Kwansai Gakuin University

March 2017 - Aug 2017

♀ Japan, Osaka

- Innovation International Management
- Japanese Business Culture
- Ethics

Bachelor Economics

Friedrich-Alexander University

di Oct 2011 - Feb 2015

Q Germany, Nuremberg

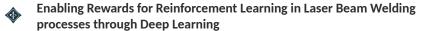
- IT Management
- Innovation Management
- Technology Management

PUBLICATIONS



Patrick Strauß; Markus Schmitz; René Wöstmann; Jochen Deuse

2018 IEEE International Conference on Big Data



Markus Schmitz, Florian Pinsker, Alexander Ruhri, Beibei Jiang, Georgij Safronov

19TH IEEE International Conference on Machine Learning and Applications

Towards RealWorld ForceSensitive Robotic Assembly through Deep Reinforcement Learning in Simulations

Marius Hebecker, Jens Lambrecht, Markus Schmitz

IEEE/ASMEInternational Conference on Advanced Intelligent Mechatronics (Accepted for publication)

Verifying the Applicability of Synthetic Image Generation for Object Detection in Industrial Quality Inspection

Majid Shirazi, Markus Schmitz, Simon Jannsen, Georgij Safronov, Anabelle Thies

20TH IEEE International Conference on Machine Learning and Applications (Under review)

Deep Reinforcement Learning for Robotic Control in HighDexterity
Assembly Tasks - A Dual Curriculum Approach

Lars Leyendecker, Markus Schmitz, Hans Zhou, Vladimir Samsonov, Marius Rittstieg

2021 Fifth IEEE International Conference on Robotic Computing (Under review)



Proceedings of the 30th European Conference on Information Systems (ECIS)(Planned for submission)

Toward Interpretable Supervised search space selection in AutoML Majid Shirazi, Markus Schmitz

WACV 2022 (Planned for submission)

LANGUAGES

English	TOEFL (114)
German	Native
Japanese	Basic
French	Basic

CODING LANGUAGES

Very Experienced
Experienced
Experienced
Intermediate
Beginner

OTHER INTERESTS

Volleyball Philosophy & Ethics Hiking

Yoga Coding Flowers