

Personal Information

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Nationality: German

Education

- Oct '17 – Sept '18 **Imperial College London** London, United Kingdom
Master of Science, Computing Science
Department of Computing
Performance: **with distinction and Group Project Prize**¹
Selected Courses: Mathematics for Machine Learning, Bayesian and Probabilistic Inference, Computer Architecture, Operating Systems, Algorithms, Databases, Robotics group project advised by **Dr. Petar Kormushev**, Robot Intelligence Lab
- May '16 – Sept '17 **Karlsruhe Institute of Technology** Karlsruhe, Germany
Master of Science, Industrial Engineering
Focus on Machine Learning, Statistics and Data Science
Performance: **with distinction, Top 4 %, average: 1.1/4.0** ²
Selected courses: Multivariate Statistical Methods, Advanced Topics in Data Analysis and Statistics, Advanced Lab Informatics (topic: Semantic analysis of political opinions), Data Mining and Applications, Master seminars in Statistics (topics: Lasso-Regression and Elastic Net; Distribution modeling in Health Care), Introduction to Statistical Optimization, Applied Econometrics
- Jan '17 – Apr '17 **Singapore Management University** Singapore
Exchange semester with focus on Design Thinking, Entrepreneurship and Innovation
- Sep '16 – Jan '17 **Tsinghua University (清华大学)** Beijing, China
Exchange semester with focus on Computer Science (Yao class, IIS)
Selected courses: Adv. Applications of Machine Learning, Machine Learning Theory
- Oct '12 – May '16 **Karlsruhe Institute of Technology** Karlsruhe, Germany
Bachelor of Science, Industrial Engineering
Performance: **Top 9 %, average: 1.5/4.0**, average in computer science modules: 1.4/4.0, average in maths modules: 1.4/4.0
- Sep '15 – Jan '16 **Jiao Tong University (上海交通大学)** Shanghai, China
Exchange semester
Extensive Chinese language studies at university and a private school

Work experience

- Nov '18 – Jun '19 **Imperial College London** London, UK
Research Engineer (Computer Vision and Robotics)
Department of Computing, Dyson Robotics Lab
Developing robot prototypes based on current computer vision research
- Jun '18 – Oct '18 **University of Oxford** Oxford, UK
Visiting Research Scholar
Institute of Biomedical Engineering, Computational Health Informatics Lab
 - Advisors: **Prof. David Clifton, Prof. Lionel Tarassenko**
 - Modeling risk in diabetes related tasks
- Apr '17 – Sept '17 **Carnegie Mellon University** Pittsburgh, PA, USA
Visiting Research Scholar
School of Computer Science, The Robotics Institute, Auton Lab
 - Advisor: **Prof. Artur Dubrawski**
 - Diagnosing internal bleeding from multivariate waveform vital sign data

¹Awarded to the best Group Project among the cohort of all MSc Computing Science and MSc Software Engineering students

²Grade scale between 1.0 (highest) and 4.0 (lowest) in 1/3 grade steps

Accepted papers

- NeurIPS/NIPS 2018 [Deep Sequence Modeling for Hemorrhage Diagnosis](#) (poster & spotlight)
Fabian Falck, Michael Pinsky, Artur Dubrawski
Conference on Neural Information Processing Systems ML4H Workshop
Submitted for publication in *ISICEM 2019*
- IROS 2018 [Human-centered manipulation and navigation with Robot DE NIRO](#) (poster & spotlight)
Fabian Falck, Sagar Doshi, Nico Smuts, John Lingi, Kim Rants, Petar Kormushev
IEEE/RSJ International Conference on Intelligent Robots and Systems Workshop Towards Robots that Exhibit Manipulation Intelligence
Submitted for publication in *Frontiers Research Topic*.
- IPP 2018 [Sentiment Political Compass: A Data-driven Analysis of Online Newspapers regarding Political Orientation](#) (presentation & discussion)
Fabian Falck, Julian Marsteller, Niklas Stoehr, Soeren Maucher, Jeana Ren, Andreas Thahammer, Achim Rettinger, Rudi Studer
The Internet, Policy & Politics Conference
Submitted for publication in journal *Policy & Internet*.

Academic work in progress

- Sum '18 Novel ideas in transfer learning for few- and zero-shot image recognition tasks in collaboration with the Knowledge Representation and Reasoning Group at University of Oxford (co-first author; to be submitted to ICCV 2019)
- Sum '18 Modeling risk in diabetes related tasks (first author; to be submitted to International Engineering in Medicine and Biology Conference (EMBC 2019))

Teaching experience

- Spr term '18 **Robotics 2, Imperial College London** London, UK
Graduate Teaching Assistant
 - Instructor: Dr. Petar Kormushev (Robot Intelligence Lab)
 - Tasks: Developing a python interface for controlling FRANKA EMIKA, a lightweight robot arm, using C++ and ROS; general support of undergrad. students in their group projects
- Sum term '16 **Foundations of Informatics, Karlsruhe Institute of Technology** Karlsruhe, Germany
Teaching Assistant
 - Tasks: Lecturing one tutorial per week, correcting assignments and exams
- Sum term '14 **Statistics, Karlsruhe Institute of Technology** Karlsruhe, Germany
Teaching Assistant
 - Tasks: Lecturing two tutorials per week, preparing and correcting exams

Engagement and Outreach

- '18 – now Reviewer at **IEEE Journal of Biomedical and Health Informatics**
- KDD '18 Volunteer at **Int. Conf. on Knowledge Discovery and Data Mining (KDD)**
- Jul '16 – now **Pioniergarage** Karlsruhe, Germany
Member and Co-organizer of the startup tour '16 to China
 - Student organization and incubator promoting entrepreneurship and start-ups
- Jun '13 – Jun '16 **Foundation Knowledge plus Competencies** Karlsruhe, Germany
Chairman of the student representation (≈ 15 hours workload per week)
 - Wide range of responsibilities aiming to improve the educational curriculum of the foundation, contact and spokesperson for all scholarship-related issues
- Oct '12 – Apr '14 **German Industrial Engineering association** Karlsruhe, Germany
Head of the Company Relations department, before: Project leader and member

Awards & Fellowships

Awards

- Oct '17 *2nd* place at *Citadel Data Open*, a world-wide data science and machine learning competition, award money: 2500 USD, Oxford, UK
- Oct '17 Creative design award, *Robot Challenge*, Imperial College Robotics Society
- '10, '11 *Dechemax*, a chemistry competition: 1st placed (2011) out of a field of more than 600 teams nationwide; 4th placed (2010)

Fellowships

- '15 *German academic scholarship*, a scholarship donated by the German state
- 17' Full tuition fee scholarship at Singapore Management University
- '14, '16 Scholarship from the *Baden-Wuerttemberg foundation* for abroad studies
- '14 Scholarship from the *German academic exchange service* for abroad studies
- '12 – '14 Scholarship from the *Foundation Knowledge plus Competencies*, advancing social and personal skills in 16 certified seminars and workshops
- '12 Honors by the *German Physical Society* and the *Society of German Chemists* for exceptional performance in the national high school diploma

Others

- PROGRAMMING Proficient: Python, C++, Linux; Good knowledge: Java, Matlab, R, Shell, Rapid Miner, Arena, L^AT_EX; Basic knowledge: Java Script, PHP, HTML/CSS; Open source activity: *tseval*: Python package for evaluating time series models <https://github.com/FabianFalck/tseval>
- LANGUAGES English (TOEFL: 112 of 120); Chinese (\approx HSK 4); German (native); Latin certificate (awarded after 5 years of study)
- HOBBIES Singing, playing the guitar

London, December, 2018