Jonas Dieker

Berlin, Germany • +49 (0)152 22440368 • jonasdieker05@gmail.com • LinkedIn

EDUCATION

10/2020 - 02/2023
Department of Informatics, TU Munich, Munich, Germany
M.Sc. Robotics, Cognition, Intelligence
- Relevant courses: Machine Learning, Techniques in AI, Deep Learning, Mobile Robotics, Multiple View Geometry, ML for Graphs and Sequential Data
- Practical: "Learning for Self-Driving Cars and Intelligent Systems"

04/2022 - present
Hybrid Systems Lab - BAIR, UC Berkeley, CA, USA
Master Thesis in Machine Learning for Sustainability
- DAAD IFI Scholarship supporting Computer Science Master Theses abroad

09/2014 - 06/2019
James Watt School of Engineering, University of Glasgow, Glasgow, UK
M.Eng. Mechanical Engineering with Honours of the First Class
- Relevant courses: Robotics, Advanced Control, Autonomous Vehicle Guidance, Non-linear Dynamics

07/2018 - 12/2018
Norwegian University of Science and Technology, Trondheim, Norway
Master Thesis in Robotics and Computer Vision

09/2016 - 05/2017
University of British Columbia, Vancouver, Canada
Mechanical Engineering (Study Abroad, 2 Semesters)

EXPERIENCE

04/2022 - present
Hybrid Systems Lab - BAIR, UC Berkeley, CA, USA
Visiting Scholar
- Generative models for simulation of realistic ocean currents
- Work with oceanic spatio-temporal data and point-reference ground truths
- Devised solutions: Tuned Simplex Noise and Conditional GANs

10/2021 - 03/2022
Visual Computing & AI Lab, TU Munich, Munich, Germany
Graduate Research Assistant in Deep Learning
- Domain adaptation for LiDAR-based object tracking in autonomous driving
- Creation of data loader for new dataset including multiple sensor modalities
- Adapted existing research and trained on new internal dataset
- Built pipeline to visualise predicted bounding boxes in point cloud

11/2020 - 10/2021
FoxInsights GmbH, Munich, Germany
Working Student in Data Analytics
- Automating creation and sending of customer invoices with Python by integration of third-party APIs saving 200+ hrs/year
- Planning and optimisation of internal BI dashboards in Grafana and Klipfolio
- Analysis of business relevant questions by querying PostgreSQL databases

07/2018 - 12/2018
Norwegian University of Science and Technology, Trondheim, Norway
Visiting Researcher
- Thesis title: "Automated Generation of Robot Path for Multi-Pass Welding using a 3D Scanner"
- Detection and extraction of weld groove geometry from point cloud
- Developed weld pass planning and execution on KUKA robot

07/2017 - 09/2017
Siemens Mobility GmbH, Berlin, Germany
Internship in Technical Procurement
- Market research into suppliers for international rail projects
- Contact with suppliers for data exchange and creation of a database
- Presentation on findings of market research

SKILLS

Programming	Python: NumPy, Matplotlib, Pandas, Scikit-learn, Keras, OpenCV, PyTorch Java & C++: Intermediate knowledge
Software/Tech	Linux, SQL, Azure, ROS, Git, Docker, MATLAB, CMake, LaTeX
Languages	English: Equivalent to native proficiency German: Native proficiency