Jonas Dieker

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

EXPERIENCE

05/2023 - present *Teraki GmbH, Berlin, Germany*
Data Scientist
- Involved in a project to develop deep learning object detection models for autonomous trains
- Conducting research into LiDAR-image sensor fusion for object detection and tracking

03/2023 - 05/2023 *Amsterdam, Netherlands (Remote)*
Freelance Data Scientist
- Leveraging GPT to generate content for social media
- A/B testing and measurement of engagement rate

04/2022 - 03/2023 *Hybrid Systems Lab - BAIR, UC Berkeley, CA, USA*
Visiting Scholar
- Researched learning generative models from extremely sparse data
- Focus on generating possible realizations of spatio-temporal environmental signals
- 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 multi-modal data loader for new dataset
- Adapted existing research and trained on new internal dataset
- Built visualisation pipeline for 3D bounding boxes in point clouds and projection to RGB image space

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
- Researched computer vision assisted robotic welding for offshore platforms
- Collected point cloud dataset and extracted of weld groove measurements
- Developed multi-pass weld planning and tested solution on KUKA robot

EDUCATION

10/2020 - 03/2023 *Department of Informatics, TU Munich, Munich, Germany*
M.Sc. Robotics, Cognition, Intelligence
- Thesis Grade: 1.0 (highest possible)
- Relevant Courses: Machine Learning, Deep Learning, Detection-Segmentation-Tracking, Mobile Robotics, Multiple View Geometry
- Semester Project: Motion Segmentation in Autonomous Driving

04/2022 - 03/2023 *Hybrid Systems Lab - BAIR, UC Berkeley, CA, USA*
Master Thesis in Generative Machine Learning
- 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
- Thesis Grade: A
- 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)

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, MongoDB, PostgreSQL
Languages	English: Equivalent to native proficiency German: Native proficiency