Jonas Dieker

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EXPERIENCE

Teraki GmbH, Berlin, Germany   05/2023 - present
Data Scientist - Research & Development
- Conducting deep learning research on LiDAR-image sensor fusion for object detection
- Trained and deployed segmentation models to Nvidia Xavier for hardware accelerated encoding
- Provided mentorship and guidance to an intern, overseeing their progress in a range of research-related computer vision tasks

Berkeley AI Research, UC Berkeley, CA, USA   04/2022 - 03/2023
Visiting Scholar
- Researched learning generative models from extremely sparse data for project on climate change
- Focus on generating possible realizations of spatio-temporal environmental signals (ocean currents)
- Devised solutions: Tuned Simplex Noise and Conditional GANs

Visual Computing & AI Lab, TU Munich, Munich, Germany   10/2021 - 03/2022
Graduate Research Assistant in Deep Learning
- Domain adaptation for LiDAR-based object tracking in autonomous driving
- Adapted existing SOTA model and trained on new internal dataset
- Implemented a visualization pipeline for 3D bounding boxes in point clouds and images, improving model interpretability

FoxInsights GmbH, Munich, Germany   11/2020 - 10/2021
Data Analyst (Working Student)
- Automating creation and sending of customer invoices 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

Norwegian University of Science and Technology, Trondheim, Norway   07/2018 - 12/2018
Visiting Researcher
- Conducted research on computer vision-guided robotic welding for offshore platforms
- Built a point cloud dataset and developed an algorithm, based on classical CV, to extract weld groove geometry
- Developed a multi-pass welding plan solution, successfully validated on KUKA robot

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

EDUCATION

Department of Informatics, TU Munich, Munich, Germany   10/2020 - 03/2023
M.Sc. Robotics, Cognition, Intelligence - Grade: 1.6 (German Scale)
- Thesis Grade: 1.0 (highest possible)
- Relevant Courses: Machine Learning, Deep Learning, Detection-Segmentation-Tracking, Mobile Robotics, Multiple View Geometry

James Watt School of Engineering, University of Glasgow, Glasgow, UK   09/2014 - 06/2019
M.Eng. Mechanical Engineering - Grade: First Class (UK classification)
- Thesis Grade: A
- Relevant Courses: Robotics, Advanced Control, Autonomous Vehicle Guidance, Non-linear Dynamics

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

SKILLS

Programming	Python: NumPy, Matplotlib, Pandas, Xarray, Scikit-learn, PyTorch, OpenCV C++11/14/17: OpenCV, Eigen, PCL, Open3D, GTest
Software/Tech	Linux, Git, Docker, Azure, MongoDB, SQL, ROS, CMake, MATLAB, RabbitMQ
Languages	English: Equivalent to native proficiency German: Native proficiency