PAUL SCHULZE

Research and Development Engineer

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EXPERIENCE

Student Researcher
Enercon GmbH
08/2021 - Ongoing | Bremen
- Implemented uncertainty quantification of aerodynamic wind turbine simulations in Python.
- Analysed measurement data with data mining tools.

Student Researcher and Developer
BIBA Gmbh
09/2020 - Ongoing | Bremen
- Set up a simulation model of a manufacturing facility in Anylogic.
- Implemented data analytics and process optimization.
- State chart based design and object-oriented approach using Java.

Internship R&D Biomedical Engineering
Carl Zeiss Meditec AG
10/2019 - 12/2019 | Oberkochen

Internship in the development of ophthalmology surgical instruments.
- Implemented electromechanical simulations in MATLAB Simulink.
- Developed a MATLAB script and GUI to streamline the measurement process and perform automatic data analysis and parameter identification.
- Carried out and analyzed electromechanical experiments.

Bachelor Thesis and Student Researcher
BIAS GmbH
05/2018 - 04/2019 | Bremen

https://github.com/schulze-paul/SPICE Coherent-Light-Simulations

Shape measurement of object surfaces using partially coherent illumination.
Grade: 1,3

EDUCATION

Master of Science
Applied and Engineering Physics
Technical University of Munich
2020 - 2022

Grade: 2.8
- Deep Learning
- Biomedical Physics
- Data Mining
- Computational Physics

Bachelor of Science
Physics
University of Bremen
2015 - 2019

Grade: 2.36

Erasmus Semester
Leiden University, Netherlands
2017 - 2018

SKILLS

AI | Health Technology | Image Processing | Algorithms | Data Processing | R&D | Convolutional Neural Networks (CNN) | Engineering Physics | Python | PyTorch | Tensorflow | Java | Git | JavaScript | Communicator | English: C2 | German: Native

PROJECTS

PaulNet Image Classifier
https://github.com/schulze-paul/PaulNet-Image-Classifier

Convolutional neural network (CNN) trained on an image classification task with the CIFAR10 dataset. It achieves a 80.6% accuracy on the test dataset.

Video Laboratory
https://github.com/schulze-paul/Video-Laboratory

Video Laboratory is a data annotation tool written in JavaScript on React and Electron that combines automated data retrieval through the YouTube API with an intuitive UX in for fast and accurate video coding.

Solitaire AI
https://github.com/schulze-paul/Solitaire-AI

A recursive algorithm that explores every possible move in peg solitaire and finds the perfect game.

Tiny Forest Fundraising Campagn
https://www.startnext.com/tiny-forest-project

Reforestation Project
- € 6300 in finds raised.
- 400 trees planted.
- Planned and installed an irrigation system.

CERTIFICATES

Agile Software Development: Clean Code Practices
LinkedIn 2020