BENJAMIN WILHELM

Computer Scientist

https://bwilhelm.net | GitHub: HedeghogCode

INTERESTS

Computer Vision and Image Analysis

Deep learning

WORK EXPERIENCE

Software Developer, KNIME GmbH (Konstanz, Germany)

March 2022 - Present

Building a new fast and powerful Python integration based on Apache Arrow and Py4J

Working Student, KNIME GmbH (Konstanz, Germany)

March 2018 - Feb 2022

Worked on multiple KNIME integrations, especially the TensorFlow, Deep Learning,

Tableau, Power BI, and Python Integration

Worked on the new columnar table backend based on Apache Arrow

Programmed mainly in Java and Python

Contributed to open-source projects

Other software development tasks

Intern, Max Plank Institute of Molecular Cell Biology and Genetics (Dresden,

Germany)

Sep 2017 - Feb 2018

Integrate TensorFlow in ImageJ/Fiji

 $Integrate\ TensorFlow\ in\ KNIME$

 $Contribution \ to \ the \ CSBDeep/CARE \ paper \ by \ making \ it \ run \ in \ Fiji \ and \ KNIME$

Minor programming tasks in Java, like a tiled execution for KNIME Image Processing

Research assistant, University of Konstanz (Konstanz, Germany)

Oct 2015 - Aug 2017

Programming in Java

Building a cluster executor for KNIME

EDUCATION

$\textbf{MS. in Computer and Information Science, University of Konstanz} \ (\texttt{Konstanz}, \texttt{And})$

Germany)

Focus on computer vision and machine learning

Oct 2019 - Feb 2022

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Image Analysis and Computer Vision I and II $\,$

Seminar about Recent Developments in Deep Learning

Master's thesis about image reconstruction with a GAN Gaussian denoiser $\,$

Overall grade "very good with distinction"

$\textbf{B.S. in Computer Science, University of Konstanz} \ (\texttt{Konstanz, Germany})$

Oct 2014 - Oct 2019

All basic courses

Mechanics in Physics and Mathematical Logic

Specialization in Data Mining and Computer Vision

Ranked 7th in the Freesound General-Purpose Audio Tagging Challenge on Kaggle as part $\,$

of the Lecture "Advanced Data Challenge"

 $Seminar\ about\ Energy\ Minimization\ Methods\ in\ Computer\ Vision$

Bachelor's thesis about the segmentation of microscope image data

Overall grade "with distinction"

Received the VEUK Award ("Preis des Vereins der Ehemaligen der Universität Konstanz (VEUK e.V.)")

High-school diploma, Erich-Hauser-Gewerbeschule (Rottweil, Germany)

Sep 2011 - Jul 2014

 $High\mbox{-school with focus in } Computer \mbox{ Science}$

SKILLS

Very familiar with

Java, Python, Git, Linux, Apache Arrow, TensorFlow, Eclipse, Scrum

Familiar with

MATLAB, C, C++, JavaScript, Bash, LaTeX, Travis CI, Jenkins