Claas A. Voelcker

MASTER STUDENT IN COMPUTER SCIENCE

Elisabethenstr. 30, 64283 Darmstadt

+49 1575 5795508 | claas@voelcker.net | https://cvoelcker.de | cvoelcker | claas-völcker

Education

Technische Universität Darmstadt
Darmstadt, Germany

M.SC. IN COMPUTER SCIENCE — *since 04/2018*

- thesis topic: Object segmentation and detection for reinforcement learning applications
- thesis supervisors: Karl Stelzner, Prof. Kristian Kersting
- notable courses: "Deep generative models", "Deep Learning: Methods & Architectures", "Reinforcement Learning"
- current GPA: 3.9

Technische Universität Darmstadt
Darmstadt, Germany

B.SC. IN COMPUTER SCIENCE — *10/2014 - 04/2018*

- thesis topic: DeepNotebooks – Interactive data analysis using Sum-Product Networks
- thesis supervisor: Prof. Kristian Kersting
- graduated with honors, GPA 3.75
- notable courses: "Introduction to AI", "Statistical Machine Learning", "Data Science Practical Lab"

Eichendorffschule
Kelkheim, Germany

ALLGEMEINE HOCHSCHULREIFE — *June 2013*

- German final grade: 1.0
- stayed at the German School New York from 06/06 - 02/08

Jobs

TU Darmstadt - Chair of Artificial Intelligence and Machine Learning
Darmstadt, Germany

RESEARCH ASSISTANT — *since 10/18*

- developer of the DeepNotebook framework for interactive data exploration
- data analysis on health care data to predict heart attack risk in ICU patients (in cooperation with UKE Hamburg)

TU Darmstadt - Department of Computer Science
Darmstadt, Germany

TEACHING ASSISTANT — *10/15 - 10/18*

- tutor for the courses "Introduction to computer science", "Parallel programming", "Propositional and first-order logic"
- supervision and coaching of student software development teams

Security Research Labs
Berlin, Germany

RESEARCH INTERNSHIP — *08/16*

- implementation of a remote execution API for automatic pen testing
- data analysis on large scale phishing campaign data to determine staff training strategies

Deutsche Bank AG
Eschborn, Germany

JUNIOR PROJECT MANAGEMENT CONSULTANT — *01/15 - 03/16*

- technical implementation and supervision of the "Roadshow Cyber Security Awareness" campaign presented in Berlin, London, Singapore and New York

Extracurricular Activity

Conference of Aspiring Students in Tech – Rhein-Main
Darmstadt, Germany

ORGANIZING COMMITEE — *06/18 - 03/19*

- part of the organizing comitee for the first CASTrm, a conference targeted at students aspiring to become researchers
- helped to write price winning concept
- in charge of coordination for the program and the diversity team

TU Darmstadt
Darmstadt, Germany

UNIVERSITY SENATE COMMITTEE ON STUDIES AND TEACHING — *10/16 - 10/18*

- student representative on the board for studies and teaching
- responsible for reviewing the study plans of the departments

Department of Computer Science, TU Darmstadt   *Darmstadt, Germany*

Bᴏᴀʀᴅ ᴏꜰ ᴛʜᴇ Fᴀᴄᴜʟᴛʏ ᴏꜰ Cᴏᴍᴘᴜᴛᴇʀ Sᴄɪᴇɴᴄᴇ   *10/2016 - 10/17, 10/18 - 10/19*

- elected student member of the faculty board
- member of several professorial appointment commissions

Departement of Computer Science, TU Darmstadt   *Darmstadt, Germany*

Fᴀᴄᴜʟᴛʏ Sᴛᴜᴅᴇɴᴛ Aꜱꜱᴏᴄɪᴀᴛɪᴏɴ   *since 10/15*

- member of the student council, working on teaching evaluation, the university's senate comitee for studies and first semester introduction; member and organizer of the Conference of German Computer Science Students

Diocese of Alaminos   *Alaminos, Phillipines*

Iɴᴛᴇʀɴᴀᴛɪᴏɴᴀʟ Vᴏʟᴜɴᴛᴇᴇʀ Sᴇʀᴠɪᴄᴇ   *08/13 - 12/13*

- international volunteer of the diocese of Limburg assigned to the diocese of Alaminos, Pangasinan; working with disabled children and the elderly

Writing

Structured Object-Aware Physics Prediction for Video Modeling and Planning   *under review, preprint available*

Kᴏꜱꜱᴇɴ, J., Sᴛᴇʟᴢɴᴇʀ, K., Hᴜꜱꜱɪɴɢ, M., Vᴏᴇʟᴄᴋᴇʀ, C., & Kᴇʀꜱᴛɪɴɢ, K.

- paper on generative scene models for physical systems from images

DeepNotebooks: Deep Probabilistic Models Construct PythonNotebooks for Reporting Datasets   *ECML/PKDD - ADS workshop 2019*

Vᴏᴇʟᴄᴋᴇʀ, C., Mᴏʟɪɴᴀ, A., Nᴇᴜᴍᴀɴɴ, J., Wᴇꜱᴛᴇʀᴍᴀɴɴ, D., & Kᴇʀꜱᴛɪɴɢ, K.

- paper on automatic data analysis using sum product networks
- published at the Automatic Data Science Workshop, cohosted with ECML/PKDD 2019

Talks

DeepNotebooks   *ECML/PKDD - ADS workshop 2019*

Sᴘᴇᴀᴋᴇʀ

- contributed talk on the DeepNotebooks framework for exploratory data analysis

Lecture on Variational Autoencoders   *DGM 2019, TU Darmstadt*

Gᴜᴇꜱᴛ Lᴇᴄᴛᴜʀᴇʀ

- invited guest lecturer during the summer term 2019 iteration of the Deep Generative Models lecture

What is "fair"? - Tackling challenges in modern AI   *MRMCD 2018, Darmstadt*

Sᴘᴇᴀᴋᴇʀ

- contributed talk on fairness and biases in AI at the Meta Rhein Main Chaos Days

Awards

Deutschlandstipendium

ᴀᴡᴀʀᴅᴇᴅ ʙʏ TU Dᴀʀᴍꜱᴛᴀᴅᴛ   *10/15 - 10/19*

- scholarship awarded to 1% of students for academic excellence

Abiturpreis

ᴀᴡᴀʀᴅᴇᴅ ʙʏ ᴛʜᴇ Gᴇʀᴍᴀɴ Mᴀᴛʜᴇᴍᴀᴛɪᴄᴀʟ Aꜱꜱᴏᴄɪᴀᴛɪᴏɴ   *07/13*

- award for achieving the highest possible grade in the final mathematics exam in high school

Skills

Programming	Python, Java, Scala, LaTeX
Machine Learning	Pytorch, Tensorflow, Numpy, Pandas
Languages	German (fluent), English (fluent), French, Latin, Tagalog/Filipino