

Claas A. Voelcker

PHD STUDENT IN COMPUTER SCIENCE

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Education

University of Toronto

Toronto, Canada

PHD IN COMPUTER SCIENCE

since 09/2020

- thesis topic: Probabilistic task aware models for reinforcement learning
- academic supervisors: Prof. Animesh Garg, Prof. Amir-massoud Farahmand

Technische Universität Darmstadt

Darmstadt, Germany

M.Sc. IN COMPUTER SCIENCE

04/2018 - 07/2020

- 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"
- graduated with honors, 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
- notable courses: "Introduction to AI", "Statistical Machine Learning", "Data Science Practical Lab"
- graduated with honors, GPA 3.75

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

University of Toronto, Vector Institute

Darmstadt, Germany

GRADUATE RESEARCH ASSISTANT

since 09/20

- Main project: probabilistic models and uncertainty quantification in task aware and meta reinforcement learning

TU Darmstadt - Chair of Artificial Intelligence and Machine Learning

Darmstadt, Germany

RESEARCH ASSISTANT

10/18 - 07/2020

- 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
- graduate teaching assistant for "Statistical machine learning"

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 COMMITTEE

06/18 - 03/19

- part of the organizing committee for the first CASTm, a conference targeted at students aspiring to become researchers
- helped to write prize 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

BOARD OF THE FACULTY OF COMPUTER SCIENCE

10/2016 - 10/17, 10/18 - 10/19

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

Diocese of Alaminos

Alaminos, Philippines

INTERNATIONAL VOLUNTEER SERVICE

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

accepted for presentation at ICLR
2020, preprint available

KOSSEN, J., STELZNER, K., HUSSING, M., VOELCKER, C., & KERSTING, 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

VOELCKER, C., MOLINA, A., NEUMANN, J., WESTERMANN, D., & KERSTING, 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

SPEAKER

- contributed talk on the DeepNotebooks framework for exploratory data analysis

Lecture on Variational Autoencoders

DGM 2019, TU Darmstadt

GUEST LECTURER

- 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

SPEAKER

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

Awards

Deutschlandstipendium

AWARDED BY TU DARMSTADT

10/15 - 10/19

- scholarship awarded to 1% of students for academic excellence

Abiturpreis

AWARDED BY THE GERMAN MATHEMATICAL ASSOCIATION

07/13

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