Marc Fischer

I am currently a PhD student in Computer Science at ETH Zurich in Switzerland. Academically I am interested in Machine Learning/AI, Programming Languages, Systems, Mathematics and especially their interaction. My main area of interest are Machine Learning methods that are to some extent reliable, interpretable, explainable or secure.

Born: February 20, 1993 Graz, Austria Nationality: Austrian

**** +41 78 863 96 45

☐ mail@marcfischer.at

A http://marcfischer.at

y @Viehzeug

Education

PhD in Computer Science, ETH Zurich 2019 MSc in Computer Science, ETH Zurich 2017-2019

My thesis project studied the intersection of Deep Learning and Logic.

BSc in Computer Science, ETH Zurich 2013-2017

Secondary College of Electronic Data Processing and Organization ("Matura"), 2007-2012

Kaindorf a.d. Sulm

Honors & awards

Silver Medal of ETH Zurich for an outstanding Master's thesis 2019

Publications

2019

2018

Marc Fischer, Mislav Balunovic, Dana Drachsler-Cohen, Timon Gehr, Ce Zhang, and Martin Vechev. Dl2: Training and querying neural networks with logic. In International Conference on Machine Learning, 2019

Pavol Bielik, Marc Fischer, and Martin Vechev. Robust relational layouts synthesis

from examples for android. In ACM SIGPLAN Notices. ACM, 2018

Teaching

Student Supervision in Seminar "Deep Learning for Big Code" 2019

ETH Zurich, by Dr. Veselin Raychev and Prof. Martin Vechev

Teaching Assistant for "Paralleles Programmieren" 2019

(Parallel programming for Computer Science Undergraduates),

ETH Zurich, by Prof. Martin Vechev and Prof. Torsten Hoefler

Teaching Assistant for "Reliable and Interpretable Artificial Intelligence", 2018

ETH Zurich, by Prof. Martin Vechev
Teaching Assistant for "Paralleles Programmieren"
(Parallel programming for Computer Science Undergraduates),
ETH Zurich, by Dr. Felix Friedrich
Teaching Assistant for "Informatik I"

(Introduction to Programming/Computer Science for Electrical Engineers), ETH Zurich, by Dr. Felix Friedrich

Work Experience

2016

2015

2012-2013

Student Research Assistant at SRILab (www.sri.inf.ethz.chi) with Prof. Martin Vechev, ETH Zurich

Research related to querying constraints on neural neural networks, adversarial examples/robustness, deep reinforcement learning, program synthesis and interpretability of deep learning. Civil Service as Software Developer at the Styrian Fire-brigade Admin-

istration (www.lfv.steiermark.at),

Focus: general software development, internal tools

Internship as Software Developer at SLR Engineering (www.slr-engineering.at),

Focus: Computer Vision, Optimization

Internship as Software Developer at Atronic/Spielo GmbH (www.spielo.com),

Focus: general software development, internal tools

Internship as Software Developer at Infonova/BearingPoint (www.infonova.com), Focus: general software development, fulfillment software

Languages

German, mother tongueEnglish, fluent, C2

• Spanish, beginner, A1-A2

<u>Hobbies</u>

- Cooking
- · Reading
- History
- Computer Gaming
- Photography