

KAI HELLI

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Education and Training

Technical University of Munich

Master of Science in Informatics

Oct. 2023 – Present

Munich, Germany

University of Freiburg

Bachelor of Science in Computer Science

Oct. 2020 – Sep. 2023

Freiburg, Germany

- Grade: 1.2 / Thesis Grade: 1.0 (German grading system)
- Thesis: Drift-Resilient TabPFN – A Bayesian Approach for Distribution Shifts in Dynamic Environments

University of Virginia

Exchange Student in Computer Science

Aug. 2022 – Dec. 2022

Charlottesville, USA

SensoPart Industriesensorik GmbH

Computer Science Expert – System Integration

Sep. 2013 – Feb. 2016

Gottenheim, Germany

- Vocational Training – Certificate of Chamber of Industry and Commerce
- Shortened by 6 months because of excellent performance – Grade: 1.2 (German grading system)

Awards

Stiftung Begabtenförderung berufliche Bildung – Aufstiegsstipendium

Scholarship

Oct. 2020 – Present

- Awarded for exceptional talent and commitment during vocational training and in the workplace

Baden-Württemberg Stiftung – BW-Stipendium

Scholarship

Aug. 2022 – Dec. 2022

Stiftung Begabtenförderung berufliche Bildung – Weiterbildungsstipendium

Scholarship

Jan. 2017 – Dec. 2019

- Awarded for outstanding performance during vocational training

Work Experience

University of Freiburg

Research Assistant

Sep. 2023 – Sep. 2024

Freiburg, Germany

- Contributed to the TabPFN codebase in the Machine Learning Lab, led by Prof. Dr. Frank Hutter, with the main focus on enhancing TabPFN's resilience against temporal distribution shifts in tabular data.

SensoPart Industriesensorik GmbH

Network Engineer

Feb. 2016 – Jul. 2022

Gottenheim, Germany

- Redesigned and migrated the organization-wide network infrastructure utilizing a hierarchical model to improve the performance, resilience, scalability, and security of the enterprise network.
- Planned and coordinated the network aspects of a newly built production hall including a secondary data center (e.g. data center interconnects, network cabinets, access points) to improve fault tolerance of the IT infrastructure.
- Designed and implemented the network infrastructure of remote sites, including international branches, and their secure connection to the corporate network.
- Maintained consolidated network services, e.g. routers, switches, firewalls, access points, and assisted in various IT projects on a part-time basis since October 2020.

Publications

Drift-Resilient TabPFN: In-Context Learning Temporal Distribution Shifts on Tabular Data

Kai Helli*, David Schnurr*, Noah Hollmann, Samuel Müller, Frank Hutter; * Equal contribution

Accepted at: NeurIPS 2024 (Main Track), NeurIPS 2024 (TRL Workshop), AutoML Conference 2024 (Workshop Track)

Additional Skills and Interests

Languages German (native), English (fluent)

Development C, C#, Python, JavaScript, SQL, Docker, Git, SVN

Technologies TCP/IP, IPv6, VPN, WLAN, VLAN, PKI, RADIUS, 802.1X, OSPF, Microsoft AD

Certificates Cisco Certified Network Professional – Routing and Switching (CCNP),
Cisco Certified Design Professional (CCDP)

Interests Deep Learning, Exploring other cultures, Travelling, Scuba Diving, Hiking, Snowboarding