

Elisa Nguyen

PhD student in Trustworthy Machine Learning

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Education

International Max Planck Research School for Intelligent Systems

Tübingen, DE

PhD student

May 2022 - present

- Thesis (tentative): Towards human-centered data attribution
- Advisor: Seong Joon Oh
- Research interests: Explainable AI, HCI, data-centric AI, and model evaluation

University of Twente

Enschede, NL

MSc in Interaction Technology, GPA: 8.6 (cum laude)

Sep. 2019 - Dec. 2021

- Thesis: Temporal Spike Attribution - A local feature-based explanation for spiking neural networks
- Thesis advisors: Prof. Christin Seifert, Dr. Gwenn Englebienne and Meike Nauta, M.Sc.

Nordakademie

Elmshorn, DE

BSc in Computer Science and Management, GPA: 1.8

Oct. 2013 - Mar. 2017

- Thesis in collaboration with Airbus: Requirements development for a PLM system for specific processes in an Industry 4.0 context
- Thesis advisors: Prof. Hinrich Schröder and Alcibiades Gonzalez, M.Sc. (Airbus).
- Erasmus Semester at ebs Paris with courses in international management and marketing.

Professional Experience

University of Twente

Enschede, NL

Literature survey on evaluation methods in explainable AI

May 2021 - Dec. 2021

Student research assistant in a team across the University of Twente and the University of Duisburg-Essen led by Meike Nauta.

This research resulted in a survey paper, published in the ACM CSUR journal.

Airbus

Hamburg, DE

IT Project Manager in Technical Data Management department

Mar. 2017 - Sep. 2019

- Scrum Master for legacy retirement of CAD Software.
- Project support (Risk, Budget and Stakeholder Management) in PLM projects.
- Technical and financial management of bundle contracts with suppliers.

Airbus

Hamburg, DE

Dual Student of Computer Science and Management

Aug. 2013 - Mar. 2017

- Internships in Airbus ICT in IT Governance, project- and service management.
- Member of Airbus' vocational training IT team in Hamburg.

Teaching experience

Supervision:

Anastasia Alekseeva

Master Thesis, Mar. 2024 - Sep. 2024, University of Tübingen

Albert Catalan

Research project, Nov. 23 - Apr. 2024, University of Tübingen

Evgenii Kortukov

Master Thesis, Jun. 2023 - Mar. 2024, University of Tübingen

Teaching:

Tutor Trustworthy ML

WS 2022/2023, University of Tübingen

TA Data Science

SS 2021, University of Twente

TA NLP

WS 2020/2021, University of Twente

Tutor Discrete Mathematics 2

Q3 2016, Nordakademie

Tutor Discrete Mathematics 1

Q1 2015, Nordakademie

Publications

* Equal contribution

Conference and Journal papers:

- [1] **Nguyen, E.**, Seo, M., & Oh, S. J. (2023). A Bayesian Approach To Analysing Training Data Attribution In Deep Learning. arXiv preprint arXiv:2305.19765. *Accepted at NeurIPS 2023*.
- [2] **Nguyen, E.**, Nauta, M., Englebienne, G. & Seifert, C. (2023). Feature Attribution Explanations for Spiking Neural Networks. arXiv preprint arXiv:2311.02110. *Accepted at CogMI 2023*.
- [3] Nauta, M., Trienes, J., Pathak, S., **Nguyen, E.**, Peters, M., Schmitt, Y., ... & Seifert, C. (2022). From anecdotal evidence to quantitative evaluation methods: A systematic review on evaluating explainable ai. *ACM Computing Surveys*.
- [4] **Nguyen, E.***, Theodorakopoulos, D.*, Pathak, S., Geerdink, J., Vijlbrief, O., Van Keulen, M., & Seifert, C. (2020, October). A hybrid text classification and language generation model for automated summarization of dutch breast cancer radiology reports. In 2020 IEEE second international conference on cognitive machine intelligence (CogMI) (pp. 72-81). IEEE.
- [5] Geissler, D.*, **Nguyen, E.***, Theodorakopoulos, D.*, & Gatti, L. (2020). Pokérator-Unveil your inner Pokémon. In ICCV (pp. 500-503).

Workshop papers:

- [1] **Nguyen, E.**, Kortukov, E., Song, J. & Oh, S. J. (2023). Exploring Practitioner Perspectives On Training Data Attribution Explanations. arXiv preprint arXiv:2310.20477. *Accepted at NeurIPS XAI in Action workshop 2023*.

Textbook:

- [1] Mucsányi, B., Kirchhof, M., **Nguyen, E.**, Rubinstein, A., Oh, S. J. (2023). Trustworthy Machine Learning. <https://trustworthyml.io/>.

Preprints:

- [1] Kortukov, E., Rubinstein, A., **Nguyen, E.**, Oh, S. J. (2024). Studying Large Language Model Behaviors Under Realistic Knowledge Conflicts. arXiv preprint arXiv: 2404.16032.

Academic Service

Reviewing

NeurIPS 2024

Workshop organization

ATTRIB@NeurIPS 2024 (in submission)

Skills

Coding

Python, Django, Version control with Git

Organization

Classical project management, Agile project management (Scrum, SAFe)

Languages

German (Mother tongue), English (C2), French (C1), Vietnamese (Mother tongue), Dutch (B2)

Outreach and Volunteering

KI macht Schule

Active Member

Tübingen, DE

Nov. 2022 - Present

KI macht Schule's mission is to educate high school students in matters of artificial intelligence and machine learning by giving workshops at local schools. Courses so far: 4 courses for students and 1 course for teachers.

Viva con Agua

Active Member

Tübingen, DE

Sep. 2022 - Present

Viva con Agua is a non-profit association for promoting clean drinking water around the world. We raise funds to support WASH projects (water, sanitation and hygiene) in Viva con Agua partner countries.

Freiwilligenbörse Hamburg

Tutor

Hamburg, DE

Jan. 2022 - Apr. 2022

In this position, I tutored students from low-income families at elementary to high school levels in Maths and English.