

An Nguyen, Dr.-Ing.

Digital Focus Topic Lead AI & Digital Assistants · Enterprise AI Architect · Postdoctoral Researcher ·
Freelance AI Engineer & Consultant

Berlin, Germany · an.nguyen@live.de · [website](#) · [LinkedIn](#) · [GitHub](#) · [Google Scholar](#)

PROFESSIONAL SUMMARY

I bridge cutting-edge AI research with enterprise-scale AI delivery. I hold a Ph.D. in Computer Science (Machine Learning), authored 10+ peer-reviewed publications, and bring 10+ years of experience building production AI systems across research and industry. At Siemens Healthineers I define enterprise AI strategy, architecture, governance, and platform capabilities for agentic AI, LLMs, knowledge graphs, and multimodal AI. I partner with executives, architects, and engineering teams to translate AI innovation into scalable enterprise platforms and products deployed in regulated healthcare environments.

CORE COMPETENCIES

Enterprise AI Strategy & Architecture: AI Strategy · AI Architecture · Technical Leadership · Product Ownership · AI Governance · Responsible AI · Stakeholder Management · Cross-functional Leadership · AI Roadmapping · Technology Strategy · Innovation Management

Applied AI: Agentic AI · Large Language Models (LLMs) · Retrieval-Augmented Generation (RAG) · Knowledge Graphs · Ontologies · Multimodal AI · NLP · Explainable AI · Probabilistic Machine Learning · Time Series Analysis · Predictive Analytics

AI Engineering: Python · PyTorch · TensorFlow · Azure · Databricks · MLOps · SQL · Git · Linux · Cloud & On-Prem Infrastructure · ML System Design

Product & Delivery: Product Ownership · Agile Development · Technical Program Leadership · AI Solution Architecture · Production ML Systems · Enterprise Software · Digital Assistants · Customer Service AI

Healthcare & Research: Healthcare AI · Medical Devices · Clinical Data Analytics · IoT Analytics · Process Mining · Scientific Research · Experimental Design · Technology Transfer · Research Supervision · Mentoring

PROFESSIONAL EXPERIENCE

Digital Focus Topic Lead — AI & Digital Assistants Siemens Healthineers

Jun 2024 – Present

- Define enterprise AI strategy, AI reference architecture, and technology roadmap for AI & Digital Assistants across Customer Services.
- Design reusable enterprise AI capabilities including agentic AI, LLMs, knowledge graphs, multimodal AI, Azure, Databricks, and hybrid cloud infrastructure.
- Establish AI governance, evaluation frameworks, Responsible AI principles, and technical standards for production AI systems.
- Lead enterprise-wide AI initiatives across product, engineering, research, and enterprise architecture.
- Influence enterprise-wide AI platform decisions including build-versus-buy evaluations, reusable platform capabilities, and long-term AI architecture.
- Drive executive alignment and technology adoption by translating AI research into scalable enterprise products for regulated healthcare.
- Mentor engineers and AI practitioners while fostering internal AI communities and sharing best practices across teams.

Freelance AI Engineer & Consultant Independent

Mar 2024 – Present

- Advise startups on enterprise AI architecture, agentic AI, LLM applications, RAG systems, and production deployment.
- Prototype and deploy production-ready AI systems, from architecture to implementation.

Senior Data Scientist & Product Owner Siemens Healthineers

Oct 2022 – May 2024

- Led design and deployment of production ML systems for near-real-time industrial machine monitoring.
- Designed operational AI platforms integrating predictive analytics, monitoring, and automated service workflows.
- Co-led enterprise AI innovation initiatives and hackathons, accelerating adoption of modern AI technologies across business units.

- Developed production ML solutions using IoT, enterprise, and PLM data.
- Built explainable-AI methods for customer-sentiment prediction and operational analytics.
- Co-invented a U.S. patent for AI-driven customer-satisfaction prediction.

ACADEMIC, RESEARCH & TEACHING

Postdoctoral Researcher — University of Erlangen–Nürnberg (FAU) 2023 – Present

Supervise PhD and Master's students; healthcare-AI research.

Research Group Lead (commissarial) · Course Creator & Instructor — FAU Erlangen–Nürnberg 2018 – 2022

Led Applied ML Workgroup (PhD students, industry projects, 2019–2020). Created and taught *ML & Data Analytics for Industry 4.0 Seminar* (2019–2022), *ML for Time Series Projects* (2020–2022), and *Project ML & Data Analytics* (2020–2022). Supervised 20+ Master's theses, projects, and internships. A collaborative mentor and connector between research, teaching, and industry practice.

Doctoral Researcher — University of Erlangen–Nürnberg (FAU) 2018 – 2022

Researched machine learning for healthcare and business analytics, with applications in gait analysis, business process management, and customer service AI. Industrial collaboration with Siemens Healthineers. Advisor: Prof. Dr. Björn Eskofier.

Visiting Researcher — University of California, Irvine 2022

Probabilistic modelling of irregular and mixed-type time-series data.

Visiting Researcher — Frankel Cardiovascular Center & Biomedical & Clinical Informatics Lab, University of Michigan 2017

ML and signal-processing algorithms for atrial-fibrillation detection from ECG data.

Peer review: NeurIPS · IJCAI · ECML · IEEE BHI

EDUCATION

Dr.-Ing., Computer Science
University of Erlangen–Nürnberg
Magna Cum Laude · 2018 – 2023

M.Sc.Eng., Electrical & Computer Engineering
University of Michigan
GPA 4.0 / 4.0 · Top 1% · 2016 – 2017

Study Abroad — Electrical Engineering
KTH Royal Institute of Technology, Stockholm
ERASMUS+ · 2014 – 2015

M.Sc., Electrical Engineering
Technical University of Berlin
Grade 1.0 · Top 1% · 2016 – 2018

B.Sc., Electrical Engineering
Technical University of Berlin
Grade 1.4 · Top 1% · 2011 – 2016

SELECTED PUBLICATIONS (FULL LIST ON GOOGLE SCHOLAR)

- Schwinn et al. incl. **An Nguyen** (co-author). "Improving Robustness against Real-World and Worst-Case Distribution Shifts through Decision Region Quantification." *ICML 2022*.
- **An Nguyen** et al. (first author). "System Design for a Data-Driven and Explainable Customer Sentiment Monitor Using IoT and Enterprise Data." *IEEE Access*, 2021.
- **An Nguyen** et al. (first author). "Development and Clinical Validation of Inertial Sensor-Based Gait-Clustering Methods in Parkinson's Disease." *JNRE*, 2019.

AWARDS, COMMUNITIES & SKILLS

- **Patent:** AI-based Customer Satisfaction Prediction for Medical Devices (US App. 17/375,306).
- **Awards:** Outstanding Master's Degree Award — VDI Berlin-Brandenburg, best engineering graduates in the region (2019) · Fulbright Travel Grant — U.S. government merit award for graduate study at the University of Michigan (2016) · Rosa Luxemburg Foundation Scholarship — competitive full study scholarship by the German Federal Ministry of Education for gifted students (2011–2018).
- **Communities:** Co-founded company internal Data Science Community (500+ members)
- **Languages:** German (native) · English (fluent) · Swedish (proficient) · Vietnamese (proficient) · French (beginner).
- **Engineering:** Python · PyTorch · TensorFlow · Azure · Databricks · LangChain · LangGraph · MLflow · SQL · Git · Linux.