

Daniel Kohlsdorf

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EXPERIENCE

Wild Dolphin Project, Florida — *Research Scientist*

2015– now

- Applied **LSTM-based sequence models** for unsupervised analysis of **dolphin vocalizations**, exploring structure and clustering in communication.
- **Fine-tuned OpenAI Whisper models** with **triplet-loss embeddings** to capture species-specific acoustic features.
- Published and presented findings at leading conferences, including IJCNN and Interspeech.

Hive App Berlin (Remote) — *Staff Data Scientist*

2025-2026

- Designed and deployed Estimated Delivery Date (EDD) prediction system (TensorFlow + LightGBM on AWS SageMaker)
- Led company-wide initiatives in A/B testing, causal inference, dashboarding, and ML performance monitoring to strengthen data-driven decision-making.
- Led the implementation of a shop optimization system using contextual multi armed bandits

Meta, London (Remote) — *Senior Software Engineer*

2022 2025

- Contributed to two-tower retrieval and ranking models for ad recommendation and targeting.
- Implemented feature engineering pipelines to improve model input quality and ad relevance.
- Developed and iterated on lookalike audience models, enabling advertisers to expand reach.
- Collaborated on ranking system improvements, focusing on efficiency, scalability, and production readiness

Shopify, Berlin — *Senior Data Scientist*

2021– 2022

- Designed and implemented an **email ranking system** to prioritize marketing and transactional emails, reducing customer overload.
- Developed a **relevance scoring model** to rank candidate emails per user, ensuring only the most valuable communications were sent.
- Set **dynamic thresholds based on churn probability**, balancing engagement with retention risk.
- Improved customer experience by optimizing email frequency while maintaining campaign effectiveness.

SKILLS

Machine Learning, Python, C++, SQL

CERTIFICATIONS

Udacity Self Driving Car Engineering Nanodegree.

Udacity Natural Language Processing Nanodegree.

Deeplearning.ai Deep Learning Specialization

Deeplearning.ai Tensorflow Specialization

LANGUAGES

German, English

PORTFOLIO

[Web](#)

[Github](#)

[Linkedin](#)

[Google Scholar](#)

New Work SE (Formerly known as Xing), Hamburg — Senior Data Scientist

2015 - 2021

- Developed **job recommendation models** with a focus on personalized ranking.
- Built a **ranking component using Gradient Boosted Trees** to improve relevance and match quality.
- Implemented **similarity search for job postings using Word2Vec embeddings**, enabling semantic matching beyond keyword search.
- **Hosted and contributed to the Recommender Systems Challenge 2016/2017**, collaborating with the research community on large-scale evaluation.

Georgia Tech, Atlanta — Graduate Research Assistant

2012 - 2015

- Applied **unsupervised learning techniques** to analyze dolphin vocalizations.
- Learned **convolutional feature representations** of audible dolphin signals using **k-means clustering**.
- Developed **unsupervised segmentation methods** for dolphin signals with **Hidden Markov Models (HMMs)** to uncover structural patterns.
- **Published results at ICASSP and in JMLR**, contributing to advances in bioacoustic machine learning research.

Team Neusta, Bremen — Software Developer

2011 - 2012

- Developed **Android and iOS applications**, focusing on usability, performance, and cross-platform consistency.
- Built **rule-based AI systems**, implementing expert-system style logic for decision automation.

University Bremen, Bremen — Student Researcher and Research Assistant

2007 - 2015

- Developed **wearable computing systems** with a focus on **gesture recognition** using sensor-based machine learning.
- Applied **machine learning for robotic systems**, enabling adaptive behavior and improved human-robot interaction.

EDUCATION

Georgia Tech, Atlanta — PhD in Computer Science (Specialization in Intelligent Systems)

2012-2015

- Conducted research on applying machine learning techniques to analyze dolphin vocalizations.
- Coursework concentrated on machine learning, computer vision, speech processing, and web systems, providing a broad foundation in AI and systems engineering.

Uni Bremen, Bremen — *Diplom Informatik*

2007-2011

- Researched and implemented **gesture recognition techniques** for human–computer interaction.
- Coursework focused on **artificial intelligence, web systems, mobile development, and wearable computing.**