Anya Von Diessl

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LinkedIn

EDUCATION

Stanford University, Stanford, CA — September 2021 - June 2025
Bachelors of Science, Mathematics

Stanford University, Stanford, CA — June 2025 - March 2026
Masters of Science, Computer Science (Artificial Intelligence Track)

EMPLOYMENT

Statistical Modeling & Inference Researcher, Stanford — June 2025 - September 2025
Conducted research on latent-variable and probabilistic models for uncertainty quantification in high-dimensional, noisy datasets. Developed and implemented Bayesian inference frameworks and variational optimization algorithms to uncover hidden structure and mitigate estimation bias in predictive modeling. Leveraging stochastic process theory, information-theoretic measures, and causal inference techniques to enhance model identifiability, interpretability, and robustness in complex real-world systems.

Founder & CTO, Vony Lending — June 2024 – September 2025
Founded and led a fintech venture (https://vony-lending.com/) developing a peer-to-peer micro-lending platform that facilitates loan requests, offers, and approvals within trusted personal networks. Architected the platform's core lending engine, implementing structured workflows for request handling, dynamic interest logic, and repayment tracking. Directed full-stack development, integrating a responsive front end with a scalable backend and optimized database schema to ensure high system reliability, low-latency performance, and seamless user interaction.

Google Intern, Google — July 2023 - September 2023
Developed a high-performance, production-scale interface for a real-time fraud detection platform within Google Ads, leveraging TypeScript, HTML, and CSS to engineer modular, scalable, and latency-optimized components. Collaborated with cross-functional teams to translate complex fraud analytics pipelines and anomaly detection workflows into intuitive, data-rich visual systems, enhancing usability, reliability, and decision speed across a platform processing billions of ad transactions daily.

Teaching Assistant for CS227b: General Game Playing, Stanford Computer Science Department — March 2025 - June 2025
Assisted in teaching a graduate-level AI course on the design of autonomous agents capable of strategic reasoning in novel environments. Guided students in applying methods from automated reasoning, symbolic knowledge representation, adversarial and heuristic search, resource-bounded planning, and algorithmic game theory to develop general-purpose intelligence systems that learn and execute strategies from formal game descriptions.

Machine Learning Researcher, Stanford Computer Science Department — September 2024 - June 2025
Developed a contrastive deep learning model to identify regulatory differences in chromatin accessibility across normal, tumor, and metastatic states. By leveraging CNN architectures like ChromBPNet, I applied advanced machine learning techniques to enhance the precision of sequence-to-function predictions, with a focus on refining computational models for disease progression, particularly in thyroid cancer.

Computational Modeling Researcher, Stanford Translational AI Lab — September 2024 - December 2024
Conducted interdisciplinary research uniting artificial intelligence, probabilistic modeling, and computational medicine. Developed and deployed deep learning architectures for computer vision and medical imaging, integrating probabilistic inference to quantify uncertainty and extract high-fidelity biomarkers. Leveraged Bayesian and data-driven modeling frameworks to improve diagnostic prediction, enhance model interpretability, and advance precision healthcare through statistically robust AI systems.

Mathematics Department Tutor, Stanford — September 2024 - Present
Provide advanced instruction in theoretical and applied mathematics through Stanford's Mathematics Department. Lead students through rigorous explorations of vector space theory, multivariable analysis, and differential systems, with specialized focus on spectral and matrix theory, eigenvalue and singular value decomposition (SVD), dimensionality reduction, proof construction, and the analysis of linear operators and dynamical systems.

COURSEWORK

Advanced Probability Theory, Stochastic Modeling, Optimization, Statistical Inference, Partial Differential Equations, Algorithms, Machine Learning, Deep Learning, Artificial Intelligence, Continuous Mathematical Methods, and Decision Making Under Uncertainty

SKILLS

Python (NumPy, pandas, PyTorch, scikit-learn, TensorFlow) • R • MATLAB • C++ • SQL • Git • Linux • Bash • High-Performance Computing • Numerical Methods • Parallel Programming • Monte Carlo Simulation • Bayesian Inference