STEVEN AN

PERSONAL INFORMATION

email   stlan@ucsd.edu

website   stevenan5.github.io

RESEARCH INTERESTS

Machine learning theory, weak supervision, ensemble methods, crowdsourcing.

EDUCATION

Doctor of Philosophy	*2019-Present* The University of California, San Diego Computer Science · Advisor: Sanjoy DASGUPTA
Master of Science	*2019-2021* The University of California, San Diego Computer Science
Bachelor of Arts and Science	*2015-2019* The University of California, Davis Math & Scientific Computation with HONORS Philosophy with HIGHEST HONORS · Advisor: Hanti LIN Minor in Computer Science

PUBLICATIONS

NeurIPS	*Sept 2025* Statistical Analysis of an Adversarial Bayesian Weak Supervision Method Author: Steven AN
IEEE TPAMI	*August 2025* Reliable Programmatic Weak Supervision with Confidence Intervals for Label Probabilities Authors: Verónica ÁLVAREZ, Santiago MAZUELAS, Steven AN, Sanjoy DASGUPTA
UAI	*July 2024* Convergence Behavior of an Adversarial Weak Supervision Method Authors: Steven AN, Sanjoy DASGUPTA

WORK EXPERIENCE

Instagram, NYC

Jun-Sep 2025   Software Engineer Intern

Improving User Interest Modeling for Stories Ranking

- Drove statistically significant offline metric wins for an industry scale neural network via the following:
  - Created new user history features and investigated their impact
  - Designed, debugged, and implemented target-aware and position-aware pooling for user history features
  - Conducted experiments exploring embedding table configurations and model quantization settings to improve model understanding
- Condensed experimental results and communicated them to my peers and higher level stakeholders

Jun-Sep 2024   Software Engineer Intern

Instagram, Menlo Park

Stories Differential Sourcing

- Enumerated well known and esoteric use cases of the Stories product
- Designed, debugged, and implemented differential sourcing for Stories to reduce query construction time
- Revamped Stories query construction unit tests to decrease code fragility

TEACHING

2020-Present   Teaching Assistant

The University of California, San Diego

Probability and Statistics · Prof. Sanjoy DASGUPTA · Fall 2020
Machine Learning: Learning Algorithms · Prof. Sanjoy DASGUPTA · Winter 2023, Fall 2023, Spring 2025, Fall 2025

SKILLS

Programming   Python, PyTorch, NumPy, CVXPY, MATLAB, C++, SQL

Other   LaTeX, Technical Writing

OTHER INFORMATION

Talks & Posters   Spotlight presentation at UAI 2024
Poster presentation at UAI 2024

Interests   DIY Perfumemaking · Film Photography (35mm, 4x5)

September 19, 2025