

Peter Sushko

AI and Computer Vision

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WORK EXPERIENCE

Allen Institute for AI (AI2)

Seattle, WA

Research Engineer

March 2025 - Current

- Core contributor behind [MolmoWeb](#), a state of the art open-source browser agent.
- Led large-scale distributed pipelines for web-agent evaluation and synthetic data generation.
- Trained multimodal vision-language models using distributed multi-GPU training with FSDP.
- Co-authored research submissions to NeurIPS, ECCV, ICML, ICLR, CVPR, and ACL.

Skills: Agentic AI, Multimodal, Distribution training, Inference, Web crawl, Post-training.

RAIVN LAB

Seattle, WA

AI Researcher

Jun 2023 - Feb 2025

- Developed [RealEdit](#), a state-of-the-art diffusion-based model for conditional image generation and editing.
- Built a large-scale dataset of 150K image-text pairs for training generative models.
- Optimized deep learning architectures for high-resolution image generation and multi-modal alignment.
- Collaborated with senior researchers to design experiments, analyze results, and refine hypotheses.

Skills: Generative AI, Diffusion Models, Multimodal Learning, Experimentation, PyTorch, Python

Neustar (Acquired by TransUnion)

San Francisco, CA

Senior Machine Learning Engineer

Dec 2021 - Aug 2022

- Developed ML models for customer attribution and campaign optimization, improving predictive accuracy.
- Led a model development team, ensuring statistical rigor and alignment with business objectives.
- Collaborated with research scientists and SWE teams to refine models and enhance performance.
- Presented insights and KPIs to C-suite, translating technical findings into actionable strategies.

Skills: Machine Learning, Ranking & Recommendation Models, Model Optimization, Scalable ML Pipelines

Machine Learning Engineer

May 2020 - Dec 2021

- Designed, trained, deployed, and validated ML models to measure marketing campaign efficiency.
- Improved customer acquisition models, boosting revenue by up to 6% for clients BofA and Nike.
- Automated GCP SQL queries, reducing EDA time from 3 days to 5 hours using Python.
- Analyzed pricing sensitivity using ML models, driving higher revenue and new customer acquisition.

Skills: Model Deployment, Scalable ML Systems, SQL & Cloud Pipelines, Automation & Optimization

Palo Alto Networks

Santa Clara, CA

Data Analyst

Aug 2019 - Mar 2020

- Implemented data pipelines to extract insights and KPIs on revenue streams of recent acquisitions.
- Decreased team workload by 200+ man-hours per month by developing an automated Python script to generate monthly revenue reports.
- Detected data trends, predicted KPIs, and visualized results with Pandas, Numpy, and Seaborn in Python.

Skills: Data Pipelines, Data Wrangling, Data Visualization, Dashboards, Forecasting, SQL, Python.

EDUCATION

University of Washington

Seattle, WA

Master of Sciences in Statistics (3.8)

Coursework: Computer Vision & Machine Learning

Santa Clara University

Santa Clara, CA

Bachelors in Mathematics and Economics

SKILLS

Technical Skills: Python, R, SQL, C++, hip, TensorFlow, GitHub, PyTorch, Hadoop, Spark, Cloud applications

Statistics: A/B Testing, Hypothesis testing, Experimental Design, Kernel Density, Likelihood Estimation

Machine Learning and Modeling: Model Building and Deployment, Feature Engineering, Deep Learning, Gen AI