

Peter Sushko

Computer Vision and Machine Learning

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WORK EXPERIENCE

RAIVN LAB UW

Seattle, WA

Student Researcher

Jun 2023 - current

- 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

San Francisco, CA

Senior Machine Learning Engineer

Dec 2021 - Aug 2022

- Developed ML models for customer attribution and campaign optimization, improving predictive accuracy.
- Led model development for 6 months, ensuring statistical rigor and alignment with business objectives.
- Collaborated with research scientists and ML 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 like BofA and Nike.
- Automated GCP SQL queries, reducing EDA time from 3 days to 5 hours with a Python script.
- 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.

Fleer

Remote

Data Analyst

Jun 2017 - Aug 2019

- Analyzed pricing data by designing, refining and evaluating A/B tests to optimize pricing strategies.
- Increased new product revenue by record 19% by building an ML model to identify leading drivers of sales.
- Created Tableau dashboards to visualize key metrics, utilizing an SQL-based data pipeline for data processing.
- Gathered, extracted and compiled data at scale using ETL pipeline; structured and validated data quality.

Skills: Pricing Experimentation, A/B testing, ML Modeling, Python, SQL pipeline, Dashboards, Tableau.

EDUCATION

University of Washington

Seattle, WA

Master of Sciences in Statistics (3.8)

Sep 2022- Jun 2024

Coursework: Experimental Design & Machine Learning

Santa Clara University

Santa Clara, CA

Bachelors in Mathematics and Economics (3.6)

Sep 2015 - Jun 2019

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