Aneesh Dahiya

ML Engineer

CONTACT ME

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- 🌐 India
- 📍 Zurich, Switzerland
- 🎂 1997

EDUCATION

M.Sc. in IT and EE 2018 - 2021
ETH Zurich GPA: 5.42/6
Focus Machine Learning

B.Tech in EE 2014 - 2018
IIT Roorkee GPA: 9.03/10
Focus ML and Control Systems

SKILLS

Programming languages

- Python (proficient)
- C++ (working knowledge)

Tech stacks

- Pyspark
- Docker
- OCI Dataflow and DataScience services
- Airflow

Last updated: 20 Feb 2025

WORK EXPERIENCE

Senior ML Engineer   Feb 2022 - Present
Oracle l Zurich

- Developed, Designed and led, multiple highly scalable ML based detectors over network logs on OCI, monitoring TBs of daily data to generate actionable insights and alerts for the Security Analysts and Stakeholders.
- Modeling, implementing and productizing end to end solution for DNS protocol abuse. Monitoring TBs of DNS logs in production everyday to flag any potential violation..
- Integrating LLMs in the investigative pipeline for cyber threats to measure fidelity of detections and reduce false positives.
- Developed and fine-tuned models for SQL log representation resulting in 70% improvement in downstream anomaly detection. Also led ML OPs effort to operationalize the tech stack for scale on cloud using K8s, Airflow and spark.
- Research in ML productization and optimization resulting in 8 pending patents at US patent office.

ML Engineer   May 2019 - Feb 2020 | Sep 2020 - Jan 2022
Barix l Zurich

- Developed a paging product as a tech lead to enable intercom messages on BARIX devices. This is a product now called Paging-Gateway-400.
- Designed and implemented an efficient anomaly detector and an alerting system for predictive maintenance on an edge device based on audio.

Master Thesis   Sep 2020 - Apr 2021
AIT Lab ETH l Zurich

- Developed a SOTA model with 14,5% improvement for 3D hand pose estimation.
- Initial approach of the work published in NeurIPS 2020 workshop.
- SOTA published and presented orally at tier 1 computer vision conference.

Junior ML Engineer   Feb 2020 - Aug 2020
Visium l Zurich

- Developed a time series forecasting model for inventory management for a SwissClient. Predicting demand with 80% accuracy.
- Designed pipelines to training deep learning models on google cloud and serving them over custom APIs endpoints.
- Developed a model to align trilingual data for training a language translation model, using a ML model enabled with human feedback. Improved training data quality by 95%.

Software Engineer   Jun 2018 - Aug 2018
Oracle l Bengaluru

- Worked as an Application Engineer in the Responsys team, developing in Java.
- Gained comprehensive understanding of processes and software development pipelines.

PUBLICATIONS

PeCLR: Self-Supervised 3D Hand Pose Estimation from monocular RGB via Equivariant Contrastive Learning

Adrian Spurr*, **Aneesh Dahiya***, Xi Wang, Xucong Zhang, and Otmar Hilliges

🎖 Paper was accepted for oral presentation at ICCV 2021 and achieved SOTA on Hand Pose estimation

Exploring self-supervised learning techniques for hand pose estimation
Aneesh Dahiya, Adrian Spurr, and Otmar Hilliges

PMLR 2021, presented at PreScience Workshop at NeurIPS 2020