

## **CONTACT ME**

☐ dahiyaaneesh.github.io



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**

- Kubernetes
- Pytorch
- Airflow
- Spark
- Docker
- OCI

# Aneesh Dahiya

## ML Engineer

## **WORK EXPERIENCE**

ML Engineer
Oracle | Zurich

Feb 2022 - Present

- Modelling, implementing and productising end to end solution for detection of DNS protocol abuse. Deployed in production to detect threats and improve security posture.
- Developed highly scalable data pipelines in PySpark processing TBs worth of system log data to extract features for modelling and metrics for analytics.
- Invented a workload driven caching mechanism for faster ML inference. Improved performance over existing industrial solutions. 3 patents pending.
- Designed and implemented orchestration scripts in helm for spark and airflow on K8s.
- Developed and fine-tuned a NLP model for SQL logs resulting in 70% improvement in anomaly detection. 3 patents pending.

#### **ML Engineer**

May 2019 - Jan 2022

Barix I 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 capable of running on an edge device.

#### **Master Thesis**

Sep 2020 - Apr 2021

AIT Lab ETH | 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 I 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 I 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

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