Aneesh Dahiya

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● India



Research and development in computer vision and machine learning.

Education

Sep 2018 - Apr 2021 M.Sc. in information technology and electrical engineering at ETH Zurich.

Focus: Machine learning and signal processing.

GPA: 5.4/6

Jul 2014 - May 2018 B.Tech in electrical engineering at Indian Institute of Technology (IIT) Roorkee.

Focus: Machine learning and control systems.

GPA: 9.1/10

Research and work experience

Sep 2020 - present Machine learning engineer at Barix AG, Zurich.

- Devloping OEM solutions using python, C++ and bash.
- Developing AI enabled solutions as POC and productization on embedded device.

Sep 2020 - Apr 2021 Master thesis on "Exploring self supervised techniques for hand pose estimation" at AIT Lab, ETH Zurich.

- Developed state-of-the-art hand pose estimation model.
- Initial approach selected at the Preregistration workshop, NeurIPS 2020.
- Refined approach selected as an oral presentation at ICCV 2021.

Feb 2020 - Aug 2020 : Junior ML engineer at Visium SA, Zurich.

- Developed and deployed models in docker container for temporal data using tensorflow and flask in python.
- Developed webscraping scripts to collect over 100K multilingual sentences from swiss websites for training translation models.

May 2019 - Jan 2020: Student research engineer at Barix AG, Zurich.

- Developed a solution for anomaly detection in an industrial setting.
- Developed a lightweight library for inter process communication between python and C++ processes.

Jun 2018 - Aug 2018: Application engineer at Oracle, Bengaluru, India.

Worked on automated personalized push campaigns for buisnesses

May 2017 - Jul 2017 : Research Intern at Hybrid Control Systems Lab, TU Munich.

• Developed GUI for symbolic control system toolkit C++ API with QT.

Publications

Adrian Spurr*, **Aneesh Dahiya***, Xi Wang, Xucong Zhang and Otmar Hilliges. Self-Supervised 3D Hand Pose Estimation from monocular RGB via Contrastive Learning, ICCV 2021.

Q Paper was selected for oral presentation. *Authors contributed equally.

Aneesh Dahiya, Adrian Spurr and Otmar Hilliges. Exploring self-supervised learning techniques for hand pose estimation, PMLR 148:255-271, 2021.



Miscellaneous

Sep 2021: Won **first prize** from Siemens in **HackZurich 2021** for developing and deploying best model for predicting disruptions on train tracks, 14 days in future from historical data.

Oct 2019 : **Hack4Good Autumn** by Analytics club at ETH Zurich. Worked on predicting minimum survival basket price for a month in war stricken region of Syria for an NGO.

Skills

Programning languages Python, C++ and Bash

ML frameworks Pytorch and Pytorch lightening, Tensorflow, OpenCV, pandas and scikit-learn

Devops git and docker

Last updated: 22 October 2021