Kaustubh Manoj Harapanahalli

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SUMMARY

Computer Science (CS) graduate student with 4 years of experience in Computer Vision (CV), Deep Learning (DL) and ML Operations. Strong working experience with reasonably good business acumen, seeking part-time.

EDUCATION

M.S. Computer Science August 2022 – May 2024 (expected)
Arizona State University, Tempe, AZ Overall GPA: 3.67, **Graduate GPA: 4.0**

B.E. Electronics and Communication Engineering Graduated June 2018
Visveswaraya Technological University, India 64.26 %

SKILLS

Python, C++, MATLAB
PyTorch, TensorFlow
Git, Gitlab, GitHub, Computer Vision, Docker, Deep Learning, ML Ops, Django, REST API, ReactJS, Apache Airflow, NumPy, Pandas, Matplotlib, JavaScript, AWS (S3, ECR, ECS, EKS, EC2), Terraform, nginx, PostgreSQL

PROFESSIONAL EXPERIENCE

Siemens Technology and Services, Bengaluru, India 8/2019 - 6/2022
Research Engineer

- Designed Active Learning strategies for 2D object detection (**40%** reduction in number of images required for model training, annotation cost savings of **20%**, **15%** reduction in manual effort for annotation verification). The solution was converted into a python package for easy integration with **PyTorch** and **TensorFlow**.
- Formulated a framework for *rapid prototyping and developing computer vision solutions for industrial AI solutions*. The framework has several moving parts as below and has reduced more than **40%** of manual effort on prototypical developments.
- Developed an automation tool for processing and generating global co-ordinates for railway use-cases using Airflow. **75%-time reduction,** manual intervention down from **8 to 3 days**.
- Designed and shaped a tool for tracking multiple model iterations executed for a particular project providing the benefit of having all the model versions, dataset versions along with the utilized data labels to be tracked.

Speckbit Exploratories, Bengaluru, India 7/2018 - 7/2019
Program Manager and Machine Learning Instructor

- Architected the *Machine Learning Foundation track* launch, an exclusive program focused on *introducing Data Science & Machine Learning* at the Bridge Student Accelerator Program.
- Successfully conducted the *Machine Learning Foundation track with* **95% completion rates** over multiple batches.
- Coached **300+ undergraduate students** to enter the domain of Machine Learning & Data Science.
- Designed & authored comprehensive content for the Hacking Data Science track.
- Trained consecutive batches of the Machine Learning Foundation.

PROJECTS

Dawn Bench Competition by Stanford, *Personal Project* Winter 2019
Trained a model using Custom Network based on Resnet architecture to reduce time to cost ratio for training a model on CIFAR-10 dataset using a V100 GPU with a validation accuracy of **92% in 140 seconds**.

Human Activity Recognition using Pose Estimations, *Class Project* Winter 2017 – Summer 2018
Built a multi-task ML model using Chainer and DNN to recognize three different human activities: Running, Walking, and Clapping with an **accuracy of 85.6%.**

EXTRACURRICULAR ACTIVITIES

Hobbies: Reading (Non-fiction books), Sports (Badminton, Squash), Anime, Rock Climbing, Trekking