# YASH JAKHOTIYA

Atlanta, GA, United States 30363 \( +1-(404)-820-5409

mailsforyashj@gmail.com https://yashjakhotiya.github.io https://www.linkedin.com/in/yash-jakhotiya

#### **EDUCATION**

## GEORGIA INSTITUTE OF TECHNOLOGY, ATLANTA

MS, COMPUTER SCIENCE. GPA: 4.0/4.0

AUGUST 2021 - MAY 2023

- Specializing in **machine learning** and robotics.
- Research work with Prof. Zsolt Kira on continual learning, novel category discovery and LLM editing.
- Courses: Computer Vision, Deep RL, ML with Limited Supervision, Natural Language Processing, Systems for ML, etc.

## **COLLEGE OF ENGINEERING, PUNE**

B. TECH, COMPUTER ENGINEERING. GPA: 9.2/10

AUGUST 2016 - MAY 2020

- Minor in **Financial Engineering**. Represented college thrice in **ACM ICPC** <u>regionals</u>.
- Courses: Calculus, Discrete Math, Linear Algebra, Probability and Stats, Algorithms, Compilers, Computer Organization, Databases, Data Structures, Digital Logic, Microprocessors, Networks, Operating Systems, Programming Languages, etc.

## WORK EXPERIENCE

**AMAZON** PALO ALTO

**APPLIED SCIENTIST INTERN** 

Worked with the Visual Search and Augmented Reality team on large-scale vision transformers.

Improved Amazon's Shop-the-Look recall@10 by 24% using high-attention patches in image retrieval.

D.E. SHAW **HYDERABAD** 

**MEMBER TECHNICAL, QUANT SYSTEMS** 

JULY 2020 - JULY 2021

MAY 2022 - AUGUST 2022

MAY 2019 - JULY 2019

- Deployed RBAC and a config validation service for internal Elastic stack. Brought down high-impact config errors to 0.
- Wrote base OCI images for firm-wide Kubernetes setup. Directly managed 3000 on-prem Linux hosts.
- As an intern, automated infrastructural alert assignments from natural language understanding of alert descriptions.
- Pushed to production before end of the internship, reducing the workload of an entire team by 86%.

#### **KUBEFLOW, GOOGLE CLOUD**

REMOTE

**GOOGLE SUMMER OF CODE STUDENT** 

JUNE 2020 - AUGUST 2020

**Deployed** efficient **MLOps** workflows using all 6 components of Kubeflow in ML pipeline <u>notebooks</u> for two NLP tasks.

#### INDIAN INSTITUTE OF SCIENCE

BANGALORE

**SUMMER RESEARCH INTERN** 

MAY 2018 - JULY 2018

Modeled human dance sequences at video analytics lab using RNNs and GANs with <0.1 normalized L2 recon loss.</li>

#### **PUBLICATIONS**

**SUMMER INTERN** 

- Improving Assistive Robotics with Deep Reinforcement Learning, NeurIPS 2022 Deep RL workshop.
- Adversarial Attacks on Transformers-Based Malware Detectors, NeurIPS 2022 Machine Learning Safety workshop.
- It Takes One to Know One? Idiomaticity Detection using Zero and One-shot Learning, NAACL 2022 SemEval workshop.

# SELECTED PROJECTS

- COEP's 2<sup>nd</sup> Student Satellite Initiative: Wrote a BCH Error Correction module to counter space radiation bit flips.
- Federated Learning: Analyzed FL tradeoffs for graph neural networks on a drug molecular property prediction problem.
- Mutual Information Regularization: Contributed the first-known PyTorch implementation of the KSG MI estimator.
- Open-source editor: Extended shnupta/bric with UNIX's Exuberant Ctags-based code navigation functionality.

## LEADERSHIP

Founded Association of Students of CE and IT, COEP, a common platform for students to encourage technical dialogue, and organized talks, contests and tutorials on competitive coding and open-source software.

## PROFESSIONAL SKILLS

- Languages: Python, Go, SQL, Puppet, Linux Shell Scripting, Matlab, C++ and C.
- Frameworks: JAX, PyTorch, TensorFlow, Keras, HuggingFace, pandas, sklearn, NumPy, SciPy, Matplotlib, Django, Flask.
- Tools: Elasticsearch, Prometheus, Grafana, Kafka, Jenkins, Phabricator, Git, Confluence, Jupyter.
- Platforms: Kubernetes, Docker, AWS, GCP, Linux RHEL, Fedora, Debian, Ubuntu.