YASH **JAKHOTIYA**

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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 regionals.
- 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

MAY 2022 - AUGUST 2022

- Worked with the <u>Visual Search and Augmented Reality team</u> on customer query-to-catalog **image retrieval**.
- Improved Amazon's <u>Shop-the-Look</u> recall@10 by 24% using high-attention patches in large-scale vision transformers.

D.E. SHAW HYDERABAD

MEMBER TECHNICAL, QUANT SYSTEMS

JULY 2020 - JULY 2021

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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 notebooks for two NLP tasks.

INDIAN INSTITUTE OF SCIENCE

BANGALORE

SUMMER RESEARCH INTERN

MAY 2018 - JULY 2018

Modeled <u>human dance sequences</u> at IISc's <u>Vision and AI Lab</u> using RNNs and GANs with <0.1 normalized L2 recon loss.

PUBLICATIONS

SUMMER INTERN

- Improving Assistive Robotics with Deep Reinforcement Learning, NeurIPS 2022 Deep RL workshop.
- <u>Adversarial Attacks on Transformers-Based Malware Detectors</u>, **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 2nd 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 <u>Association of Students of CE and IT, COEP</u>**, a common platform for students to engage in technical dialogue, and organized talks, contests and tutorials on competitive coding and open-source software.

PROFESSIONAL SKILLS

- Languages: Python, Go, SQL, Puppet, Ansible, 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.