# YASH JAIN

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404.429.4813



jinga-lala



yash-jain



bitshots

## **EDUCATION**

Georgia Tech, ATL, USA Masters of Science in Computer

Science

GPA: 4.0 / 4.0 | Aug.2021-May.2023

IIT Bombay, India

B.Tech. Computer Science (With

Honors)

GPA: 8.91 / 10 | Jul.2017-Jul.2021

#### KEY COURSEWORK

**Graduate Courses:** 

ML with Limited Supervision Computer Vision Deep Learning

**Undergraduate Courses:** 

Natural Language Processing
Organization of Web Information
Artificial Intelligence
Adv. Methods in Satellite Image Proc.
Machine Learning for Remote Sensing
Operating Systems
Data Structures and Algorithms

## TECHNICAL SKILLS

Proficient-

- Python C++ Tensorflow Pytorch
- Keras MATLAB SQL GIT LATEX

Familiar-

Java • Bash •Spark •MapReduce

### AWARDS & FELLOWSHIPS

- Research Excellence Award for B.Tech Thesis Project, IITB CS, 2021
- Recipient of Dhirubai Ambani Scholarship for supporting my Master's studies at GaTech. 2021
- Summer Internship Fellowship, Aalto University, Finland (2021)
- All India Rank 29, JEE Advanced 2017
- Gold & Silver Medal representing India- IJSO, Argentina 2014

### **PUBLICATIONS**

UbiComp'22 ColloSSL: Collaborative Self-Supervised Learning for HAR

Yash Jain\*, Chi Ian Tang\*, Chulhong Min, Fahim Kawsar, Akhil Mathur

ISWC'22 Poster\* On the Effectiveness of Virtual IMU Data for Eating Detection with

Wrist Sensors

Yash Jain, Hyeok Kwon, Thomas Plöetz

\* Under submission

CIKM'21 Integrating Transductive And Inductive Embeddings

Improves Link Prediction Accuracy

Yash Jain\*, Chitrank Gupta\*, Abir De, Soumen Chakrabarti

ICML'21 Group Supervised Learning: Extending Self-Supervised Learning

to Multi-Device Settings

<u>Yash Jain</u>\*, Chi Ian Tang\*, Chulhong Min, Fahim Kawsar, Akhil Mathur Workshop on Self-Supervised Learning for Reasoning and Perception

UbiComp'20 RFID Tattoo: A wireless platform for speech recognition

Jingxian Wang, Chengfeng Pan, Haojian Jin, Vaibhav Singh, <u>Yash Jain</u>, Jason I. Hong, Carmel Majidi, Swarun Kumar UbiComp 2020 Best Paper Award, U.S. Patent Pending

IJCAI 2021 Sister Conferences Best Papers

## WORK EXPERIENCE

May-Aug'22 Microsoft | Applied Scientist Intern | Michael Bentley & Vibhav Vineet

• Developed a novel pipeline of image difference captioning task for powerpoint slide data by generating a synthetic dataset in a self-

supervised manner

Jan-April'22 Google Research, USA | Research collaboration | Dilip Krishnan

• Integrated noisy information from supervised trained models with contrastive learning for decreasing the training time for SSL methods

May-Aug'21 Nokia Bell Labs, UK | Research Intern | Akhil Mathur

Group Supervised Learning: Extending SSL to Multi-Device Settings

- Formulated a novel framework, Group Supervised Learning (GSL), which utilizes synchronous multi-device unsupervised data, extending the principles of contrastive learning to a group setting.
- Outperformed supervised and semi-supervised baselines by 15% in F-1 score in RealWorld dataset.

May-July'20 Flipkart | Data Science Intern | Nikesh Garera & Nithish Pai Automated E-commerce Question-Answering system

- Generated synthetic queries from a limited set of user query to increase the dataset size by more than 30%.
- Combined BERT and GPT-2 models for developing a target producttype classification system which would then prompt the textgeneration model to answer user query in natural language

## RESEARCH PROJECTS

Aug-Dec'21 CLRView: View Selection for Contrastive Learning of Visual Representations Prof. Judy Hoffman

• Utilized multiple camera views as augmentations for contrastive learning by addressing the view selection problem during training.

• Outperformed SimCLR and SimSiam baselines on WildTrack dataset.

Aug-Dec'20 Meta Self-learning with Noisy Student Prof. Biplab Banerjee

While training large networks using MAML is expensive, our proposed method allows for training of large student networks using fewshot pseudo labels which outperforms the teacher learnt using MAML in fewer epochs