# YASH JAIN

✉ yashjain@gatech.edu

☎ 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
Yash Jain*, 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, Yash Jain, 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 for image difference captioning 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 product-type classification system which would then prompt the text-generation 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 few-shot pseudo labels which outperforms the teacher learnt using MAML in fewer epochs