

# Gaurav Bhatt

## Curriculum Vitae

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🌐 [GauravBh1010tt](https://github.com/GauravBh1010tt)

### Education and Work

- 2021– **PhD, Computer Science**, University of British Columbia, Vancouver, Canada.  
Advisor Dr Leonid Sigal  
Project Representation and Concept Learning, Continual Learning for Classification and Object Detection.
- 2019–2021 **Research Assistant**, Indian Institute of Technology Hyderabad, Hyderabad.  
Advisor Dr Vineeth Balasubramanian  
Project Domain translation, zero-shot learning using adversarial and latent variable models.
- 2018–2019 **Research Scientist**, Descript-AI.  
Project Audio denoising, enhancement, and tagging using deep generative models.
- 2015–2018 **MTech, Computer Science**, Indian Institute of Technology Roorkee, Roorkee.  
CGPA - 9.2/10 (*First Division with Distinction*)  
Thesis Text-based question answering system (Deep learning for QA)

### Interests

Deep learning, machine learning, computer vision, NLP, data sciences

### Skills

- Programming Languages **Python, Matlab, R, BASH.**
- Software Platforms **Pytorch, Keras, Tensorflow, Amazon AWS, Scikit-Learn.**

### Honors

- Dec. 2023 **Presented our research paper at NeurIPS'23, New Orleans, United States of America.**
- Nov. 2023 **Student funding grant from *The British Machine Vision Association and Society for Pattern Recognition* for paper presentation in BMVC, Aberdeen, United Kingdom.**
- May. 2018 **Top open-source ML, DL, NLP contributor (by mybridge) - Rank 3 out of 250 open-source repositories.**
- Nov. 2017 **Travel grant from State Government for paper presentation in ACPR - 40,000 Rupees.**
- Dec. 2015 **Travel grant from ACM-SIGIR for paper presentation in FIRE - 15,000 Rupees.**
- Aug. 2015 **MHRD graduate student assistance-ship at IIT Roorkee - 1,44,000 Rupees per year.**
- March. 2015 **Qualified GATE exam in Computer Science (All India Rank - 204 out of 1,15,000).**
- Aug. 2013 **Best student technical presentation at SAE INDIA NIS student convention - 5,000 Rupees.**

### Open-source Contribution

- 2018–present **DL-Seq2Seq.**  
This repository consists of Pytorch implementation of papers on sequence-to-sequence and bayesian learning. Currently, the implementations includes sketch generation, variational autoencoders, scheduled sampling, handwriting synthesis, neural machine translation and handwriting generation.  
Github: <https://github.com/GauravBh1010tt/DL-Seq2Seq>
- 2016–present **DeepLearn.**

This repository contains Tensorflow/Keras implementation of research papers on NLP, CV, ML, and deep learning. The topics includes ranking based question-answer retrieval, multi-modal deep models, attentive models for computing contextual sentence similarity, fake news stance detection, acousitce scene recognition, etc. Currently, DeepLearn has implementations of 15+ research papers.

Github: <https://github.com/GauravBh1010tt/DeepLearn>

## Publications

Web Link <https://scholar.google.co.in/citations?user=PcmMT-4AAAAJ&hl=en>

- 2023 **Bhatt, G., Das, D., Sigal, L., and Balasubramanian, V.N., Mitigating the Effect of Incidental Correlations on Part-based Learning., In NeurIPS'23.**
- 2023 **Bhatt, G., Das, D., Sigal, L., and Balasubramanian, V.N., Weakly-supervised Spatially Grounded Concept Learner for Few-Shot Learning., In BMVC'23.**
- 2022 **Bhatt, G., and Balasubramanian, V.N., Learning Style Subspaces for Controllable Unpaired Domain Translation., In WACV'23.**
- 2020 **Bhatt, G., Chandok, C., and Balasubramanian, V.N., Learning from Anywhere: Rethinking Zero-Shot Learning with Limited Supervision., In IJCAI'21.**
- 2019 **Bhatt, G., Jha, P., and Raman, B., 2019. Representation Learning Using Step-based Deep Multi-Modal Autoencoders., In Pattern Recognition, Elsevier'19.**
- 2018 **Bhatt, G., Sharma, A., Sharma, S., Nagpal, A., Raman, B., and Mittal, A., 2018. Combining Neural, Statistical and External Features for Fake News Stance Identification., In WWW'2018, Companion..**
- 2017 **Bhatt, G., Jha, P., and Raman, B., 2017, November. Common Representation Learning Using Step-based Correlation Multi-Modal CNN., In ACPR'17.**

## Teaching Experience

- 2023- **Workshop for Canada Revenue Agency (CRA), Bias in AI (Vector Institute), TA.**
- Instructor Dr. Sayyed Nezhadi, University of Toronto
- 2023- **CPSC-425, Computer Vision and Deep Learning (UBC), Teaching Assistant.**
- Instructor Dr. Leonid Sigal
- 2021-2022 **CPSC-330, Applied Machine Learning (UBC), Teaching Assistant.**
- Instructor Dr. Varada Kolhatkar (2021), Dr. Gulia Toti (2022)

## References

### **Dr. Leonid Sigal.**

Associate Professor, Computer science department, UBC, Vancouver, Canada

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### **Dr. V N Balasubramanian.**

Associate Professor, Computer science department, IIT-Hyderabad.

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### **Dr. B Raman.**

Professor, Computer science department, IIT-Roorkee, India.

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