Gaurav Bhatt

Curriculum Vitae

gauravbhatt.cs.iitr@gmail.com
gauravbh1010tt.github.io
GauravBh1010tt

Work

2024 **Research Fellow**, *Internship*, Amazon, Palo Alto, United States

Project Optimizing True Learning-to-Rank Utility using Counterfactual Reward Optimization.

2023-2024 **Student Researcher**, The Vector Institute for AI, Toronto, Canada

Projects Technical facilitator for the FastLane program, RAG boot camps, and BIAS in AI workshop

2018–2019 **Research Scientist**, Descript-AI

Project Audio denoising, enhancement, and tagging using deep generative models.

Education

2021- **PhD, Computer Science**, University of British Columbia, Vancouver, Canada

Advisor Dr Leonid Sigal

Project Building Robust and Adaptive Foundation Models: Concept and Part-based Learning, Continual Learning, Bias and Fairness.

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.

2015–2018 **MTech**, *Computer Science*, Indian Institute of Technology Roorkee, Roorkee
CGPA - 9.2/10 (First Division with Distinction)

Interests and Skills

Deep learning, machine learning, computer vision, NLP, data sciences, fine-tuning of foundational models

Honors

2025 **Serving as a reviewer for NeurIPS'25, ICLR'25, CVPR'25, TPAMI, and Pattern Recognition**

2024 **Serving as a reviewer for ICLR'24, ECCV'24, CVPR'24, TPAMI, and Pattern Recognition**

Sep. 2024 **Presented our research paper at ECCV'24, Milan, Italy**

July. 2024 **Gave a talk on Understanding Biases in Generative Models**, *RAG Bootcamp*, Vector Institute, Toronto, Canada

Dec. 2023 **Presented our research paper at NeurIPS'23, New Orleans, USA**

Dec. 2023 **Presented our research paper at BMVC'23, Aberdeen, UK**

May. 2018 **Top open-source ML, DL, NLP contributer (by mybridge) - Rank 3 out of 250 open-source repositories**

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)**

Open-source Contribution

2018–2020 **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`

2016–2020 **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://gauravbh1010tt.github.io/publications/`

2025 **Bhatt, G., Chinchure, A., Zhao, J., and Sigal, L., Alignment-Preserving Fine-Tuning via Constrained Optimization.**, *Under preparation*

2025 **Bhatt, G., Thekumparampil, K.K., Gangwani, T., Xiao, T., and Sigal, L., RewardRank: Optimizing True Learning-to-Rank Utility.**, *arXiv*

2024 **Bhatt, G., Ross, J., and Sigal, L., Preventing Catastrophic Forgetting through Memory Networks in Continuous Detection.**, *ECCV'24*

2024 **Chinchure, A*., Shukla, P*., Bhatt, G., Salji, K., Hosanagar, K., Sigal, L., and Turk, M., TIBET: Identifying and Evaluating Biases in Text-to-Image Generative Models.**, *ECCV'24*

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*

2021 **Bhatt, G., Chandok, C., and Balasubramanian, V.N., Learning from Anywhere: Rethinking Zero-Shot Learning with Limited Supervision.**, *In IJCAI'21*

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

2021-2023 **CPSC-330, Applied Machine Learning (UBC)**, *Teaching Assistant*

Instructor Dr. [Varada Kolhatkar (2021), Gulia Toti (2022), Mathias Lécuyer and Mehrdad Oveisi (2023)]

References

Dr. Leonid Sigal

Professor, Computer science department, UBC, Vancouver, Canada

Url `https://www.cs.ubc.ca/~lsigal/`

Email lsigal@cs.ubc.ca

Dr. V N Balasubramanian

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

Url `https://www.iith.ac.in/~vineethnb/`

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Dr. Kwang Moo Yi

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

Url `https://www.cs.ubc.ca/~kmyi/`

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