Gaurav Bhatt

Curriculum Vitae



Work

- 2024 Research Fellow, Internship, Amazon, Palo Alto, United States
- Project Data-driven reward model for training ranking models
- 2023-2024 Student Researcher, The Vector Institute for AI, Toronto, Canada
 - Projects Technical facilitator for the FastLane program, RAG boot camps, and BIAS in Al workshop
- 2018–2019 Research Scientist, Descript-Al
 - 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://scholar.google.co.in/citations?user=PcmMT-4AAAAJ&hl=en
 - 2025 <u>Bhatt, G.</u>, Shukla, P., Zhao, J., and Sigal, L., Safe Adaptation of Foundation Models via Alignment-Preserving Fine-Tuning., *Under preparation*
 - 2025 <u>Bhatt, G.</u>, Thekumparampil, K.K., Gangwani, T., Xiao, T., and Sigal, L., Data-Driven Reward Modeling for Counterfactual Learning to Rank., *Submitted*
 - 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 Isigal@cs.ubc.ca

Dr. V N Balasubramanian

Professor, Computer science department, IIT-Hyderabad.

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

Email vineethnb@iith.ac.in