Maharshi **Gor**

NLP Researcher · Engineer

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Skill Set

Research Interests: NLP, Question Answering, Retrievers, Multi-linguality, Deep Learning, Representation Learning

Tools and Technologies: Python, Java, C/C++, R, Matlab, JavaScript, SQL, Redis, Neo4j, DGraph

Frameworks: Huggingface, PyTorch, JAX, LangChain, DSPy, T5X, TensorFlow, Keras, Apache Beam, Django, Spring

Education

University of Maryland
College Park, MD, US

M.S / Ph.D. in Computer Science — Natural Language Understanding | GPA: 4.0/4.0

Fall 2021 - Fall 2026

Advisors: Prof. Tianyi Zhou and Prof. Jordan Boyd-Graber

Visvesvaraya National Institute of Technology (VNIT)
Nagpur, India

B.Tech. in Computer Science and Engineering

July 2012 – May 2016

Publications and Preprints

Yoo Yeon Sung, **Maharshi Gor**, Eve Fleisig, Ishani Mondal, Jordan Boyd-Graber "Is your benchmark truly adversarial? AdvScore: Evaluating Human-Grounded Adversarialness", ***North American Chapter of the Association for Computational Linguistics (NAACL), 2025*** [arXiv] **[Outstanding paper award]**

Maharshi Gor, Tianyi Zhou, Hal Daumé III, Jordan Boyd-Graber "Do great minds think alike? Investigating Human-AI Complementarity in Question Answering with CAIMIRA", ***Empirical Methods in Natural Language Processing (EMNLP), 2024*** [arXiv]

Gaurang Sriramanan, **Maharshi Gor**, Soheil Feizi, "Toward Efficient Robust Training against Union of L_p Threat Models", ***Neural Information Processing Systems (NeurIPS), 2022*** [pdf] **[Oral at AdvML FRONTIERS, ICML 2022]**

Maharshi Gor, Kellie Webster, Jordan Boyd-Graber, "Toward Deconfounding the Influence of Entity Demographics for Question Answering Accuracy", ***Empirical Methods in Natural Language Processing (EMNLP), 2021*** [arXiv]

Julian Martin Eisenschlos, **Maharshi Gor**, Thomas Müller, William W. Cohen, "MATE: Multi-view Attention for Table Transformer Efficiency", ***Empirical Methods in Natural Language Processing (EMNLP), 2021*** [arXiv] **[Oral]**

Jogendra Nath Kundu*, **Maharshi Gor***, Dakshit Agrawal, R. Venkatesh Babu, "GAN-Tree: An Incrementally Learned Hierarchical Generative Framework for Multi-Modal Data Distributions", ***IEEE International Conference on Computer Vision (ICCV), 2019*** [arXiv]

Jogendra Nath Kundu*, **Maharshi Gor***, R. Venkatesh Babu, "BiHMP GAN: Bidirectional 3D Human Motion Prediction GAN", ***33rd AAAI Conference on Artificial Intelligence, 2019*** [arXiv] **[Spotlight]**

Jogendra Nath Kundu*, **Maharshi Gor***, Phani Krishna Uppala, R. Venkatesh Babu, "Unsupervised Feature Learning of Action Sequences as Trajectories in Pose Manifold", ***IEEE Winter Conf. on Applications of Computer Vision (WACV), 2019*** [arXiv] **[Oral]**

** equal contribution - names listed alphabetically*

Research/Work Experience

Contextual.ai
Mountain View, CA, United States

Research Intern

May. 2024 - Aug. 2024

Reasoning Over Retrievers: Can we compress multiple reasoning step before/after retriever into a singler LLM-based retriever?

Cohere
Remote, MD, United States

ML Research Intern | Mentors: Patrick Lewis

May. 2023 - Aug. 2023

Investigation into error modes of citation and claim generation quality for Retrieval Augmented Generative (RAG) models.

X, the Moonshot Factory / Google Labs
Mountain View, CA, United States

Student Researcher | Mentors: Michele Catasta, Aakanksha Chowdhery, Christian Szegedy

May. 2022 - Dec. 2022

Semi-confidential work on long-context document understanding and Code synthesis using external memory based LLMs.

Google Research
New York, United States

AI Researcher, NLP | Mentors: Prof. Jordan Boyd-Graber, Prof. William Cohen

Aug. 2019 - Aug. 2021

Model Analysis, Interpretability and development of memory-efficient methods for Question Answering

Video Analytics Lab

Bengaluru, India

Visiting Researcher | Advisor: Prof. R Venkatesh Babu

Jan. 2018- Apr. 2019

- **GAN-Tree: An Incrementally Learned Hierarchical Generative Framework for Multi-Modal Data Distributions [ICCV 2019]**
  - A hierarchical tree framework for Generative Adversarial Networks (GANs) for learning multimodal disjoint data distributions supporting incremental learning of data samples from a new distribution and maintaining persistency across all versions
- **BiHMP GAN: Bidirectional 3D Human Motion Prediction GAN [AAAI 2019, Spotlight]**
  - A generative approach for 3D human skeleton sequences using a novel Discriminator architecture, enabling content loss in a probabilistic framework
  - Shows superiority, both in terms of qualitative and quantitative measures, over previously available state of the art methods for both long-term human motion generation and short-term forecastings.
- **Unsupervised Feature Learning of Action Sequences as Trajectories in Pose Manifold [WACV 2019, Oral]**
  - Modelled sequences of the pose embeddings as a trajectory in the pose manifold.
  - Achieved competitive state-of-the-art results for action recognition task with minimal supervision on labeled information while comparing against previous fully-supervised deep learning approaches.

Amazon

Bengaluru, India

Software Engineer | Amazon Android Appstore

Aug. 2017 - Dec. 2017

- Contributed to re-architecture of the back-end services for App Submission and Catalog Ingestion.
- Contributed to Database migration from Oracle to Postgres

Trilogy Innovations (formerly CodeNation Innovation Labs)

Bengaluru, India

Software / Innovation Engineer

July. 2016 - July. 2017

- **Semantics Addition and Relevance Improvement of a Search Engine of an intra-org social network using a Knowledge Graph.**
  - Achieved Word Sense Disambiguation through Lexical and Topological Query Enrichment using Community Clustering on KG.
  - Reduced the TP90 response time from 8s to 500 ms
- **Fuzzy Classification System for source code commits of projects on Version Control Systems.**
  - Developed a commit classification system over a VCS and automated it as service for continuous provision of comprehensive details of the kind of contribution made by a developer on/across project(s)
- **A Gamification Framework around agile processes for achieving enhanced productivity of software developers.**
  - Product-designer and primary architect of the core framework.
  - Created 20 new code quality metrics for measurement of various categories of developer productivity.
  - Introduced, developed, and shipped the prototype to the client in 6 months period.

Honors & Awards

2021 **Student Conference Travel Award by EMNLP**, EMNLP 2021

2021 **Dean's Fellowship and Chair's Fellowship Award**, University of Maryland, College Park

2019 **Microsoft Research Travel Grant**, AAAI 2019

2019 **ACM India-IARCS Travel Grant**, AAAI 2019

2018 **Country Rank (United States) 60, across 100,000 active users**, CodeChef Rankings — ***Profile Link***

2013–16 **Top 60 every year, across over 6000+ teams** , ACM ICPC (International Collegiate Programming Contest) on-site Asia Regionals

2013–15 **Consistent 1st prize Winner**, Freak-O-Matix, the open mathematics Olympiad at VNIT (Undergrad)

2009-11 **Country Rank (India) 22, State Rank in top 5**, Indian National Mathematics Olympiad (INMO)

Service

2025 **Mentor, Student Research Workshop (SRW)**, ACL 2025

2024 **Outstanding Reviewer**, EMNLP 2024

2024 **Reviewer**, ACL ARR 2024 (Feb, April, June, October)

2021 **Program Committee Member**, Workshops in **ACL 2022**, **NAACL 2022**

2020-21 **Reviewer**, ICLR 2022, NeurIPS 2021, ACL 2021, EMNLP 2020, ICML 2020, ACL 2020

2018 **Problem Setter**, MindSpark 18 Codeathon, organized by College of Engineering, Pune on Codechef. — ***Pune, India***

2017 **Problem Setter**, CodeAgon 2017 - The All India Hiring Challenge for Codenation Solutions. — ***Bengaluru, India***