Rishabh Maheshwary

 $\verb|rf.rishabh@gmail.com|| + 91 - 8427119320 | GitHub| LinkedIn| Scholar| Website| | Compared to the compared$

Work Experience

• Facebook AI Research - AI Resident

California, U.S.

My research was focused on designing intelligent and reliable systems having joint understanding of vision and language modalities.

Nov 2021 – Dec 2022

• **Verisk AI** – *Research Intern*

Hyderabad, India

I worked on joint language and vision understanding of multimodal content and semantic understanding of natural language documents.

May 2021 – Oct 2021

• MSB Docs – Software Developer Intern

Chandigarh, India

I improved the existing e-signing application by adding new features that track changes made to the document and allows bulk signing of multiple documents.

Jan 2019 – June 2019

• Google Summer of Code – Software Developer Intern

Remote

I developed an application that allows users to report calamities on google maps so that nearby users can view, share, and communicate with the people involved in the crisis.

Apr 2018 – Sept 2018

Publications

- 1. Aligning T5 with Shared Human Values through Reinforcement Learning from Human Feedback. Under submission in the *ACL Rolling Review*.
- 2. Corentin Dancette, Spencer Whitehead, **Rishabh Maheshwary**, Ramakrishna Vedantam, Stefan Scherer, Xinlei Chen, Matthieu Cord, Marcus Rohrbach. Improving Selective Visual Question Answering by Learning from Your Peers. In the *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR*, 2023) Vancouver, Canada.
- 3. Vivek Kumar, **Rishabh Maheshwary**, Vikram Pudi. Practice Makes a Solver Perfect: Data Augmentation methods for Math Word Problem Sovers. In the *Proceedings of North American Chapter of the Association for Computational Linguistics* (NAACL 2022), Seattle, Washington.
- 4. **Rishabh Maheshwary***, Saket Maheshwary*, Vikram Pudi. A Strong Baseline for Query Efficient Attacks in a Black Box Setting. In the *Proceedings of Empirical Methods in Natural Language Processing (EMNLP)* 2021, Punta Cana, Dominican Republic.
- 5. **Rishabh Maheshwary***, Vivek Kumar*, Vikram Pudi. Adversarial Examples for Evaluating Math Word Problem Solvers. In the *Findings of ACL*: *Empirical Methods in Natural Language Processing* (*EMNLP*) 2021, Punta Cana, Dominican Republic.
- 6. **Rishabh Maheshwary**, Saket Maheshwary, Vikram Pudi. Generating Natural Language Attacks in a Hard Label Black Box Setting. In the *Proceedings of Association for the Advancement of Artificial Intelligence (AAAI)* 2021, Vancouver, Canada.

7. **Rishabh Maheshwary**, Saket Maheshwary, Vikram Pudi. A Context Aware Approach for Generating Natural Language Attacks. In the *Proceedings of Association for the Advancement of Artificial Intelligence (AAAI)* 2021, Vancouver, Canada.

Education

• International Institute of Information Technology, Hyderabad Hyderabad, India MS by Research in Computer Science and Engineering | CGPA: 8.7/10 2019 - 2021 University Institute of Engineering and Technology, Panjab University Chandigarh, India BTech in Computer Science and Engineering | CGPA: 8.4/10 2015 - 2019• Spring Dale Senior School Amritsar, India Senior Secondary Education 2015 • Saint Francis School Amritsar, India Secondary Education 2013

Major Projects

• Information Extraction from Form like Documents

The aim is to design an intelligent reading system that is expected to respond to ad-hoc requests for information, expressed in natural language questions by human users.

• Generating Adversarial Attacks on Natural Language Processing Models

The aim is to evaluate the robustness and generalization of text classification, entailment, question answering and language modelling systems.

• MultiHop Question Answering

The aim is to answer questions which require reasoning over multiple supporting documents.

• Deep Learning for detecting Hate Speech Tweets

The aim is to identify abusive language, flag offensive content using natural language processing.

Awards and Achievements

Google Summer of Code and Google CodeIn mentor.
 Ranked 1st out of 100+ teams in CODETRIX (National level coding contest).
 Ranked 3rd out of 100+ teams in CODE-IT (National level coding contest).

Programming Languages and Technologies

- Python, PyTorch, C++, C, Shell, Git
- Machine Learning, Deep learning, Reinforcement learning
- NLP, Multimodal vision & language

^{*} Equal Contribution