# Rishabh Maheshwary

#### **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. 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.
- 2. 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.
- 3. **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.
- 4. **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.
- 5. **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.
- 6. **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.

<sup>\*</sup> Equal Contribution

## **Education**

• International Institute of Information Technology, Hyderabad MS by Research in Computer Science and Engineering   CGPA: 8.7/10	<b>Hyderabad, India</b> 2019 – 2021
• University Institute of Engineering and Technology, Panjab University BTech in Computer Science and Engineering   CGPA: 8.4/10	Chandigarh, India 2015 – 2019
• Spring Dale Senior School Senior Secondary Education	Amritsar, India 2015
• Saint Francis School Secondary Education	Amritsar, India 2013
Major Projects	
• Information Extraction from Form like Documents  The aim is to design an intelligent reading system that is expected to respond for information, expressed in natural language questions by human users.	2021 to ad-hoc requests
<ul> <li>Generating Adversarial Attacks on Natural Language Processing Models         The aim is to evaluate the robustness and generalization of text classification, question answering and language modelling systems.     </li> </ul>	2019 entailment,
MultiHop Question Answering     The aim is to answer questions which require reasoning over multiple support	2019 rting documents.
• Deep Learning for detecting Hate Speech Tweets  The aim is to identify abusive language, flag offensive content using natural la	2018 anguage processing.
Awards and Achievements	
Google Summer of Code and Google CodeIn mentor.	2018

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Google Summer of Code and Google CodeIn mentor.	2018
• Ranked $1st$ out of $100+$ teams in <b>CODETRIX</b> (National level coding contest).	2017
• Ranked $3rd$ out of 100+ teams in <b>CODE-IT</b> (National level coding contest).	2016

## **Programming Languages and Technologies**

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