

# Rabiul Awal

MAIR LAB at Mila, Montreal

<https://rabiul.me>

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## Education

**Mila, University of Montreal**

Montreal, Quebec

PhD. Computer Science, Advisor: Aishwarya Agrawal

Courses: Reinforcement Learning and Optimal Control

09/2024 –

**University of Saskatchewan**

Saskatoon, Canada

MSc. Computer Science (Overall grade 88%)

Advisor: Michael Horsch, Roy Ka-Wei Lee

Thesis: Tackling Social Value Tasks with Multilingual NLP [\[pdf\]](#)

01/2021 – 12/2022

**Noakhali Science and Technology University**

Noakhali, Bangladesh

BSc. Computer Science

03/2014 – 12/2018

## Publication

Google Scholar: <https://scholar.google.com/citations?user=o0cLfUMAAAAJ&hl=en>

1. “BigDocs: A Permissively-Licensed Dataset for Training Vision-Language Models on Document and Code Tasks.” Juan A. Rodriguez, Xiangru Jian, Siba Smarak Panigrahi, Tianyu Zhang, Aarash Feizi, Abhay Puri, Akshay Kalkunte Suresh, François Savard, Amirhossein Abaskohi, Ahmed Masry, Shravan Nayak, Mahsa Massoud, **Rabiul Awal** et. al.  
In Submission Workshop on Responsibly Building the Next Generation of Multimodal Foundational Models, NeurIPS 2024.
2. “VisMin: Visual Minimal-Change Understanding.” **Rabiul Awal\***, Saba Ahmadi\*, Le Zhang\*, and Aishwarya Agrawal.  
The Conference on Neural Information Processing Systems (NeurIPS), 2024. [\[pdf\]](#) [\[website\]](#)
3. “Benchmarking Vision Language Models for Cultural Understanding.” Shravan Nayak, Kanishk Jain, **Rabiul Awal**, Siva Reddy, Sjoerd van Steenkiste, Lisa Anne Hendricks, Karolina Stanczak, Aishwarya Agrawal.  
The 2024 Conference on Empirical Methods in Natural Language Processing (EMNLP), 2024. [\[pdf\]](#) [\[website\]](#)
4. “Contrasting Intra-modal and Ranking Cross-modal Hard Negatives to Enhance Visio-linguistic Compositional Understanding.” Le Zhang, **Rabiul Awal**, Aishwarya Agrawal.  
IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR), 2024. [\[pdf\]](#) [\[code\]](#)
5. “Investigating Prompting Techniques for Zero- and Few-Shot Visual Question Answering.” **Rabiul Awal**, Le Zhang, Aishwarya Agrawal.  
Prompting in Vision Workshop, CVPR, 2024. (Oral) [\[pdf\]](#) [\[code\]](#)
6. “Evaluating GPT-3 Generated Explanations for Hateful Content Moderation.” Han Wang, Ming Shan Hee, **Rabiul Awal**, Roy Ka-Wei Lee, and Kenny Tsu Wei Choo.  
International Joint Conference on Artificial Intelligence (IJCAI), 2023. [\[pdf\]](#) [\[code\]](#)
7. “AngryBERT: Joint Learning Target and Emotion for Hate Speech Detection.” **Rabiul Awal**, Rui Cao, Roy Ka-Wei Lee, Sandra Mitrović.  
Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD), 2021. [\[pdf\]](#) [\[code\]](#)

## Experience

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<b>ServiceNow Research, Multimodal Team</b> <i>Visiting Researcher</i>	<i>Montreal, Canada</i> 07/2024 –
<b>Mila - Quebec AI Institute, University of Montreal</b> <i>Research Intern, Advisor: Aishwarya Agrawal</i>	<i>Montreal, Canada</i> 01/2023 – 08/2024
<b>Mitacs, LST Accelerate Program</b> <i>Machine Learning Intern</i>	<i>Saskatoon, Canada</i> 03/2022 – 09/2022
<b>Social AI Studio, SUTD</b> <i>Student Researcher, Advisor: Roy Ka-Wei Lee</i>	<i>Remote</i> 06/2020 – 11/2022
<b>Goava Sales Intelligence AB</b> <i>Software Engineer</i>	<i>Dhaka, Bangladesh</i> 01/2019 – 12/2020

## In-progress research

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- Controllable Object-Centric Representations with Language and Coordinate Supervision
- Localized, Action-centric and Spatial-aware Image Editing of Everyday Scenes via Implicit Control

## Awards

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Selected for CIFAR DLRL Summer School at Toronto	2024
Selected for Upper Bound Talent Bursary at Alberta (\$1500)	2024
Selected for Alberta University AI Week Talent Bursary (\$1500)	2022
Graduate Teaching Fellowship @UofS, Canada	2021
1st place at NSTU Intra University Programming Contest, Dhaka, Bangladesh	2016
3rd place at CoU Regional Programming Contest (CoURPC), Comilla, Bangladesh	2015

## Service & Leadership

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<b>Reviewers:</b> ECCV24, CVPR24, ACL23, SIGIR22, AACL22, ICDM21	
<b>Organizer:</b> Language Grounding Reading Group at Mila	2023 –
<b>MSc Representative:</b> Computer Science Graduate Council @UofS	2021–2022
<b>Organizer:</b> <a href="#">NLPDhaka Reading Group</a>	01/2021 – 12/2022
<b>President:</b> Computing Club @NSTU, Noakhali, Bangladesh	01/2017 – 06/2018

## Skills & Interests

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**Research:** Object-centric Representation Learning, Generative Models, AI in Physical World  
**Skills:** Python (PyTorch, Tensorflow), Java, C/C++, NoSQL (Elasticsearch), AWS (SageMaker, EC2, Lambda)