

Masum Hasan

3rd year PhD Student, Computer Science,
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<https://masumhasan.net>



[Masum06](#)



[masum6](#)



[Scholar](#)



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Research Interest

(LLM + ML) \cap Game Engines = Conversational AI + Synthetic Data

Publications

- [SAPIEN: Affective Virtual Agents Powered by Large Language Models](#). Masum Hasan, Cengiz Ozel, Sammy Potter, Ehsan Hoque, **ACIIW 2023**
- [Auto-Gait: Automatic Ataxia Risk Assessment with Computer Vision on Gait Task Videos](#). Wasifur Rahman, Masum Hasan, Md Saiful Islam, Titilayo Olubajo, Jeet Thaker, Abdelrahman Abdelkader, Phillip Yang, Tetsuo Ashizawa, Ehsan Hoque. **UbiComp 2023**
- [CoDesc: A Large Code-Description Parallel Dataset](#). Masum Hasan, Tanveer Muttaqeen, Ishtiaq Niloy, Kazi Mehrab, Tahmid Hasan, Mahim Pantho, Wasi Ahmad, Rifat Shahriyar, Anindya Iqbal. Venue: **ACL Findings 2021**
- [LowResource at BLP-2023 Task 2: Leveraging BanglaBert for Low Resource Sentiment Analysis of Bangla Language](#). Aunabil Chakma, Masum Hasan. Venue: **EMNLP 2023, BLP Workshop**
- [Using a Balanced Scorecard to Identify Opportunities to Improve Code Review Effectiveness: An Industrial Experience Report](#). Masum Hasan, Anindya Iqbal, Amiangshu Bosu, Mohammad Rafid Ul Islam, A.J.M. Imtiajur Rahman. Venue: **EMSE (Journal)**, *Impact Factor: 8.41*
- [Review4Repair: Code Review Aided Automatic Program Repairing](#). Faria Huq, Masum Hasan, Mahim Pantho, Sazan Mahbub, Anindya Iqbal, Toufique Ahmed. Venue: **IST (Journal)**, *Impact Factor: 6.93*
- [Hitting your MARQ: Multimodal ARGument Quality Assessment](#). Md Kamrul Hasan, James Spann, Masum Hasan Md. Saiful Islam, Kurtis Haut, Rada Mihalcea and Ehsan Hoque. Venue: **EMNLP 2021**
- [Not Low-Resource Anymore: Aligner Ensembling, Batch Filtering, and New Datasets for Bengali-English Machine Translation](#). Tahmid Hasan, Abhik Bhattacharjee, Kazi Samin, Masum Hasan, Madhusudan Basak, M. Sohel Rahman, Rifat Shahriyar. Venue: **EMNLP 2020**
- [Text2App: A Framework for Creating Android Apps from Text Descriptions](#). Masum Hasan, Kazi Sajeed Mehrab, Wasi Uddin Ahmad, Rifat Shahriyar. **NLP4Prog, ACL-IJCNLP 2021**
- [Recognition of Bengali Handwritten Digits Using Convolutional Neural Network Architectures](#). Md Mahmudul Hasan, Md Rafid Ul Islam, Md Tareq Mahmood. Venue: **ICBSLP 2018, **Best Student paper award****
- [Early Detection of Earthquake Using Satellite Based Quantum Computing](#). Akhter Al Amin, Mahmudul Hasan, Kazi Sinthia Kabir, Tanzila Choudhury, ABM Alim Al Islam. Venue: **ICCSNT, 2015**
- [BERT2Code: Can Pretrained Language Models be Leveraged for Code Search?](#) Abdullah Al Ishtiaq, Masum Hasan, Md. Mahim Anjum Haque, Kazi Sajeed Mehrab, Tanveer Muttaqeen, Tahmid Hasan, Anindya Iqbal, Rifat Shahriyar, **ArXiv 2020**

Professional Experience

Graduate Research Assistant, [ROC-HCI lab](#), University of Rochester, NY

Aug 2021 to Present

- Supervised by [Prof. Ehsan Hoque](#)
- Artificial Intelligence, Human Computer Interaction, Machine Learning

Cofounder, SAPIEN Coach, LLC, NY*Mar 2023 to Present*

- [SAPIEN.Coach](#) is an interactive, multilingual, emotionally responsive, virtual-human-based coaching platform for learning academic or soft skills.

TES Remote Research Assistant, Auburn University, AL*Jun 2021 to Aug 2021*

- Supervised by Prof. [Shubhra \(Santu\) Karmaker](#)
- Natural Language Processing, Machine Learning.

Research Assistant (RA), Applied Machine Learning Lab, BUET*Nov 2018 to Jun 2021*

- Supervised by, [Prof. Rifat Shahriyar](#), [Prof. Anindya Iqbal](#)
- ML for source code: Source Code Summarization/Synthesis/Search/Repair/Compression
- NLP for Bengali: Bengali-GPT-2, Bengali-English NMT

Education

PhD Student, Computer Science (CS)*University of Rochester (UofR) ~ Aug 2021 - Present***Master's in Computer Science (CS)***University of Rochester (UofR) ~ Aug 2021 - Aug 2023*

- Area Paper: Automatic Ataxia Risk Assessment with Computer Vision

BSc. In Computer Science and Engineering (CSE)*Bangladesh University of Engineering and Technology (BUET) ~ Oct 2018*

- Thesis: Mythbusting Gender Stereotypes Using Natural Language Processing

Public Speaking

- ⊕ Radio appearance on WXXI News, [“Connections with Evan Dawson”](#) talking about the future of human-AI interactions, December 2023
- ⊕ Speaker at [FlowerCity.AI](#) conference, December 2023
- ⊕ Speaker on 4-part workshop series on Generative AI, Fall 2023 at University of Rochester.
- ⊕ Conducted “Introduction to ChatGPT” workshop, Spring 2023 at University of Rochester
- ⊕ Created an introductory [Machine Learning](#) course in Bengali, 2021.

Blogs and Articles

Machine Learning:

- [Absolute Beginner's Guide to Machine Learning and Deep Learning](#)
- [Setup and Run fast.ai in Amazon AWS](#)

Graduate Admission:

- [How I got 4 Ph.D. offers in the US with a CGPA 2.79 — and what you can learn from it](#)

Extracurricular Activities

- ⊕ Audible addict, worst performer at my improv club, in a toxic relationship with my OneWheel, sporadic rock climber, existential dread (not because of AI).