# ROHAN SAHA

# PhD Student Department of Computing Science University of Alberta

Email: rohansaha60@gmail.com Webpage: simpleparadox.github.io

#### Research Interests

Deep Learning, Language Models

#### Education

University of Alberta

2022-Present

PhD - Computing Science. GPA: 4.0/4.0

Edmonton Canada

Curriculum Learning for language models.

Supervisor: Alona Fyshe

University of Alberta

2019-2021

MSc - Computing Science. GPA:3.5/4.0

Edmonton, Canada

Using language models to understand how the brain processes language.

Supervisor: Alona Fyshe

Kalinga Institute of Industrial Technology

2015-2019

Bachelor of Technology, Computer Science and Engineering. GPA: 9.48/10.0

Bhubaneswar, India

# **Employment**

• Natural Resources Canada, Government of Canada

2023

**NLP Research Intern** - Led a successful project to upgrade the language model based recommendation engine for suggesting similar records on geo.ca Supervisor: Xinli Cai Bo Lu.

• Alberta Machine Intelligence Institute (AMII)

2023

AI Career Accelerator Program Participant (Consulting) - Course content contributor for multiple modules for the ML training course offered by AMII. Supervisor: André dos Santos.

• Robert Bosch Engineering and Business Solutions

2019

**Software Engineering Intern** - Teamed with 4 interns to design and develop a mixed reality proof-of-concept application using Microsoft HoloLens to visualize levels of ambient radiation. Supervisor: Ajay Devulapalli.

• Endurance International Group (Newfold Digital)

2018

**Software Engineering Intern** - Worked with a team of 2 people to upgrade the primary payments collection system to run on the latest version of Ruby on Rails. Supervisor: Gopal Rohra, Adesh Kala.

Page 1 of 3 Rohan Saha October 13, 2023

## Research

- \* = Equal Contribution
  - Rohan Saha\*, Jennifer Campbell\*, Janet F. Werker, and Alona Fyshe. Insights into early word comprehension: Tracking the neural representations of word semantics in infants, September 2023 (Under Review).Preprint.
  - Arif Shahriar\*, Rohan Saha\*, and Denilson Barbosa. 2023. Relational Extraction on Wikipedia Tables Using Convolutional and Memory Networks. July 11, 2023(Under Review)Preprint
  - Rohan Saha, Cassidy Pirlot. Analysis of Evolutionary Program Synthesis for Card Games. January 2021 Link
  - Rohan Saha. Homonym Identification using BERT Using a Clustering Approach. April 2020 Link
  - Rohan Saha. Comparing Classification Models on Kepler Data. Jan 2021 Link

# **Teaching**

F = Fall semester, W = Winter semester

• Teaching Assistant - University of Alberta

W2023

CMPUT-302: Introduction to Human Computer Interaction - Assisted the facilitation of the course to teach and design principles surrounding educational technology applications.

• Teaching Assistant - University of Alberta

F2020

**PSYCO-576:** Machine Learning for Psychology - Designed 10+ hours of jupyter notebooks assignments to teach applications of machine learning to neuroscience data.

• Teaching Assistant - University of Alberta

F2019,W2020,W2021

CMPUT-301: Software Engineering - Involved in teaching hands-on labs mentoring teams of undergraduate students for building an android mobile application. Technologies covered: Android, Java, Firestore NoSQL, Unit / Intent testing, Git.

#### **Talks**

- Google ML Study Jam Series: Hands on walkthrough of a Kaggle Learn course. I gave a talk on how one can train their first machine learning model in python and talked about other foundational ML topics (May 2023). Video.
- Tech Talk Linear Models in Machine Learning: Lead speaker for a session on Linear Models at the Machine Learning Bootcamp organized by Google Developers Group Edmonton and Calgary Data Science Academy (October 2020) Video.
- Parallels between computer and human representations of meaning (with Dr. Alona Fyshe): How machine learning can be used with brain-imaging data to understand the processing of information in the human brain. (September 2020) Video.

Page 2 of 3 Rohan Saha October 13, 2023

## Awards

Name Year KIIT Merit Scholarship (INR 30000) 2019

### Service

#### Reviewing

Association of Computational Linguistics (ACL), Neural Information Processing Systems (NeurIPS)

#### Department Service

• Computing Science Graduate Student's Association - Vice President 2021-2022

• Computing Science Graduate Student's Association - Academic Director 2020-2021

#### Other

• Google Developers Groups Cloud Edmonton - Executive 2021-Present

Page 3 of 3 Rohan Saha October 13, 2023