### **KEITH REBELLO**

Boston, MA | rebello.k@northeastern.edu | +1-(626)-292-9490 | keithrebello.github.io | linkedin.com/in/keithrebello Available: May-August 2022

#### **EDUCATION**

Northeastern University, Boston MA. September 2021 - Present Khoury College of Computer Science Expected Graduation: 2023

Candidate for Master of Science in Artificial Intelligence

Symbiosis University, Pune, IN
Symbiosis Center for Distance Learning

6PA: 88%

Post Graduate Diploma in School Counseling

University of Mumbai, Mumbai, IN

2020
MCT's Rajiv Gandhi Institute of Technology (RGIT)

2020
GPA: 8.5/10

Bachelor of Engineering in Information Technology

## TECHNICAL KNOWLEDGE

Languages: Python, JavaScript, C, Java, R programming, HTML, CSS, PHP

**Databases:** MySQL, MongoDB, Neo4j

Skills: NLP, DL, Machine Learning, Soft Computing, Cloud (AWS, GCP, Azure)

Libraries: TensorFlow, Keras, PyTorch, Scikit-learn, Turicreate, Jax, Flask, Selenium, OpenCV, HuggingFace Certifications: Machine Learning, Natural Language Processing, Advanced Machine Learning, AI in Medicine NLP Domains: NLU, NLG, Dialogue Management, Question Answering, Sentiment Analysis, Knowledge Extraction.

WORK EXPERIENCE

#### Research Assistant, Relational Agents Group Lab at Northeastern University, Boston, MA

February 2022- Present

GPA: 3.67

- Developed a server and logging tool to simplify the generation of databases, and experiment navigation for a within-subjects, controlled experiment design that studies the ability of robots and conversational agents to persuade users to make healthier choices.
- Assisted with a research study with promotes health literacy in minority populations through embodied conversational agents.

# Freelance Data Scientist for a Dubai-based consultancy, Dubai, UAE

August 2020 – February 2021

- Built a state-of-the-art AI-powered multi-modal fact-checker for ten thousand concurrent requests with multilingual query support for both English and Arabic.
- Designed the machine learning, natural language processing, and deployment module architectures based on two months of research and development.
- Constructed a server to host and run the software efficiently and to scale for thousands of concurrent requests.

### **PUBLICATIONS**

Graph-Based Transfer Learning for Conversational Agents (IEEE)

July 2020

- Energy-efficient Face Recognition Authentication System Using Human Detection Internet-of-Things Modules (IEEE) June 2020
- Emotionally Intelligent Artificially Intelligent Virtual Companion (IJREAM)

May 2020

#### **PROJECTS**

# Sentiment Analysis using ULMFiT, Solo Project

May 2020 - August 2020

- Performed sentiment analysis on Twitter US Airlines Dataset based on the ULMFiT model by Fastai. Achieved a record accuracy of 84.22% relative to other Kaggle submissions for the same dataset.
- Compared against DNNs, CNNs, LSTMs, Transformers and Graph Neural-Networks.

## **Emotionally Intelligent Artificially Intelligent Virtual Companion**, Team Lead, RGIT

January 2019 - October 2020

- Designed an Emotionally Intelligent embodied conversational agent capable of generating a response by utilizing NLP, graph databases, and theories from neuroscience and psychology.
- Selected as a top five undergraduate project for both 2019 and 2020 by the head of department for computer science and information technology.

### **INTERESTS/ACTIVITIES**

- Top 3 National Grand Finalist (out of 10,000 entries) at the Smart India Hackathon for ML-based Error Log Management.
- Winner (out of 50 grand final entries) of Unscript 2k18 State-level Hackathon for Smart News Virtual Agent.