JENIYA TABASSUM

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- 5+ years of hands-on experience in building machine learning for large scale user user generated texts
- ♦ 3+ years of experience in developing novel deep learning models
- Proficient in PyTorch, Keras, Huggingface frameworks

EDUCATION

The Ohio State University (OSU), Columbus, Ohio, USA

12/2020

Ph.D. in Computer Science and Engineering

Thesis: Information Extraction From User Generated Noisy Texts (dissertation)

Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh

04/2012

B.S. in Computer Science and Engineering

CGPA: 3.87/4.00 (top 5%)

TECHNICAL SKILLS

- ♦ Programming Languages: **Python**, Java, Scala, R, Matlab.
- NLP and Deep learning libraries: PyTorch, HuggingFace, Keras, Tensorflow, Stanford CoreNLP, Weka, Scipy, Scikit, NLTK, TweePy
- ⋄ Database: Oracle, MySQL, JSON

RESEARCH EXPERIENCE

Graduate Research Assistant, OSU (Advisors: Prof. Wei Xu & Prof. Alan Ritter)

08/2014 - 12/2020

- ♦ Fine Grained Entity Extraction From Software Text (web-demo / code / data / paper / talk)
- Lead a team of 4 annotators to create the first software domain named-entity corpus with 15k+ StackOVerflow sentences
 - Proposed an embedding level attention for the transformer based NER model
 - Proposed model achieved F1 Score of 78.41 with 21.6 increase over vanilla BERT (<u>current State of the Art</u>)
 - Tools: Python, PyTorch, Huggingface, Javascript, Tornado, Brat
- Entity and Relation Extraction From Wet Lab Protocol (code / data / paper)
 - Lead a team of 3 annotators to create an entity-relation corpus for the procedural texts from 700+ wet lab recipes
 - Developed neural ensemble models for both task
 - Proposed model achieved F1 Score of 76.84 for NER task and F1 Score of 81.32 for RE task (current State of the Art)
 - Tools: Python, PyTorch Scikit, Brat
- Time Information Resolution From Tweets (code / data / paper / talk)
 - Developed a temporal tagger to detect & and normalize tweet time expressions by utilizing the distant supervision approach
 - Developed a date resolver that can combine the numerical date features with word vectors via bi-linear BiLSTM model
 - Proposed model achieved F1 Score of 68.12 with 17% increase over SUTIME (current State of the Art)
 - Tools: Python, Keras, Tensorflow, Scala, Sklearn
- User Profile Mining From Twitter (code / data)
 - Modeled the spread of information through tweets
 - Analyzed the tweets from 40M+ users to evaluate whether the profile is controlled by human or bots
 - Tools: Python, TweePy, Humanizr, Botometer
- Learning Semantics From Software Social Networks (code / data)
 - Extracted proximity from the followers activity of 84M+ GitHub repositories
 - Created user embeddings and repository embeddings from the text contents of the repository-user network
 - Utilized the proposed repository embedding to evaluate similarities in between repositories
 - <u>Tools:</u> Python, PyGithub, Numpy

Undergraduate Research Assistant, BUET (Advisors: Prof. Masud Hasan & Prof. Eunus Ali)

02/2010 - 06/2013

- Social Media on Disaster Response (paper)
 - Explored the impact of social media in solving disaster related problem by analyzing the Facebook posts on the Savar Tragedy
 - Proposed an approach to co-ordinate the relief distribution by filtering out the repetitive post
 - Tools: Python, LIWC, R
- Web Community Extraction (paper / talk)
 - Proposed a novel extraction and ranking algorithm for web communities
 - Demonstrated improvement in auctions of a sponsored search market by utilizing the proposed algorithm
 - Tools: Java, Matlab

PUBLICATIONS

- ♦ Jeniya Tabassum, Mounica Maddela, Wei Xu and Alan Ritter, "Code and Named Entity Recognition in StackOverflow," ACL '20.
- ♦ **Jeniya Tabassum**, Syndey Lee, Wei Xu and Alan Ritter, "WNUT-2020 Task 1 Overview: Extracting Entities and Relations from Wet Lab Protocols," WNUT @ EMNLP '20.
- ♦ Jeniya Tabassum, Alan Ritter and Wei Xu, "Time Expression Resolution for Social Media Data," WiNLP @ ACL '17.
- ♦ **Jeniya Tabassum**, Alan Ritter and Wei Xu, "TweeTIME: Minimally Supervised Method for Recognizing and Normalizing Time Expressions in Twitter," EMNLP '16.
- ♦ Jeniya Tabassum and Alan Ritter, "Distant Supervision for Temporal Resolution," MASC-SLL '16.
- Asif Salekin, Jeniya Tabassum and Masud Hasan, "Extract and Rank Web Communities," WIMS '13.
- Jeniya Tabassum, Himel Dev, Mohammed Eunus Ali and Md. Fahim Abdullah, "Role of Social Media during Disaster in the Context
 of Savar Tragedy," WADM '13.

PROFESSIONAL EXPERIENCE

Senior Lecturer, OSU, CSE

01/2021 - present

- Instructed the course on "Introduction to AI (Intermediate Concepts)" to a class of 120 students
- ♦ Supervised 25+ student projects

Lecturer, OSU, CSE 01/2020 - 12/2020

- ♦ Instructed the course on "Introduction to AI (Basic Concepts)" to a class of 40 students
- ♦ Designed 4 programming assignments to evaluate the student understanding of AI concepts
- Collaborated with faculty supervisors to update the syllabus and create the course contents with current ML algorithms

SERVICES

- Reviewer/Program Committee: ACL '18-'20, EMNLP '19-'20, AAAI '20-'21, NAACL '19-'21, W-NUT '16-'20, SRW '19-'20
- ♦ Student Chair: ACL-SRW '18
- ♦ Student Organizer: NLP Speaker Series (OSU) ['16 '18]
- ♦ Vice President: Graduate Women in Computer Science (OSU) ['19- '20]