

LIZA BIALIK

✉ liza.bialik@gmail.com

☎ 857-636-8481

📍 Medford, MA

🌐 [linkedin.com/in/lizabialik](https://www.linkedin.com/in/lizabialik)

🐙 github.com/lbialik

WORK EXPERIENCE

Software Development Engineer

Hitachi Vantara

📅 January 2023 - present

📍 Waltham, MA

Maintained and continued developing a data storage application on an agile team. Participated in code reviews, design discussions, T-shirt sizings, sprint planning meetings, and daily stand-ups.

Research Intern

IBM Research

📅 Summer 2021

📍 Remote

Built a casual knowledge graph from wikipedia timelines. Evaluated Summary Markov Models with the Forecasting Significant Societal Events team (resulting paper published in IJCAI).

Research Intern

Raytheon BBN Technologies

📅 Summer 2020

📍 Cambridge, MA

Calculated and incorporated Knowledge Element level contextual embeddings into existing information extraction pipeline for use in corpus level entity and event co-reference.

📅 Summer 2019

📍 Cambridge, MA

Developed an emotion classification LSTM model in Tensorflow using extracted MFCC features.

Engineering Intern

PatientsLikeMe

📅 Summer 2018

📍 Cambridge, MA

Built new user polling functionality in React and Ruby on Rails.

PROJECTS

Bolete Filter App

Co-created a React Native mobile app for The Bolete Filter, a synoptic key (triage) for North American Boletes.

Adversarial Recommendation with Reviews

Worked in collaboration with Amazon and UMass to create a cGAN-based system inspired by AR-CF (Chae '20) addressing the cold start problem which incorporated review embeddings into adversarial training and utilized the trained discriminator during Collaborative Filtering.

Bolete Classifier

An exploration of different bolete mushroom classification approaches that utilize modern deep learning techniques and explicit/implicit domain knowledge.

BERT-oditsky

A computational analogue of Lera Boroditsky's famous 2003 psycholinguistic experiment exploring to what degree, if any, does the behavior of pre-trained language models exhibit linguistic relativity w.r.t. grammatical gender.

DadBot

A pun generator based on sentiment word embeddings and phonological similarity. Reranks potential puns based on global and local surprisal ratios obtained using BERT.

EDUCATION

M.S. in Computer Science

University of Massachusetts, Amherst

📅 Sept. 2020 - May 2022

GPA: 4.0

B.S. in Computer Science

B.A. in Linguistics

University of Massachusetts, Amherst

📅 Sept. 2016 - Feb. 2020

GPA: 3.92

PUBLICATIONS

D. Bhattacharjya, Saurabh Sihag, Oktie Hassanzadeh, Liza Bialik. *Summary Markov Models for Event Sequences*. IJCAI, 2022.

LANGUAGES & FRAMEWORKS

Python

Java

Perl

TypeScript

React

React Native

Ruby on Rails

Tensorflow

NumPy

PyTorch

NLTK

Scikit-learn

HuggingFace

ACTIVITIES & VOLUNTEERING

Adventure Course Director

Served as the Ropes Course Supervisor at Camp Kingswood in Bridgton, ME during the summer of 2022. Led a team of 8 specialists to run the ropes course for 300+ kids between the ages of 7 and 16. Organized, planned, and facilitated camp-wide programming and events.

Theater on the Roof

Cast member in a Russian Community Theater.

ImprovBoston

Resident cast member on Harold Night.