

## Education

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**University of Massachusetts Amherst**

*Master of Science in Computer Science*

Amherst, MA

Sep 2018 – May 2020

**Coursework:** Software Engineering, Neural Networks, Deep Learning for NLP

**University of Massachusetts Amherst**

*Bachelor of Science in Computer Science*

Amherst, MA

Sep 2014 – May 2018

**Coursework:** Web Development, Databases, Algorithms, Machine Learning, Statistics I/II

**Activities:** Chair of UMass ACM chapter

## Skills

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**Languages:** Python, JavaScript, Java, SQL, HTML, CSS

**ML Libraries:** NumPy, Pandas, Scikit-Learn, PyTorch, TensorFlow

**Web Libraries:** React, Node.js, Flask

**Other:** Git, LaTeX

## Experience

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**Amazon**

*Applied Scientist Intern*

Cambridge, MA

Jan 2020 – May 2020

- Developed semi-supervised machine learning baselines in PyTorch in order to utilize unlabeled data for classification task
- Implemented custom feed-forward and LSTM neural networks utilizing online deep learning for streaming data classification

**WW International (formerly Weight Watchers)**

*Data Science Intern*

New York, NY

May 2019 – Aug 2019

- Created word embeddings for food-items based on food journal entry data and food ontology data from a knowledge graph
- Analyzed embeddings using qualitative analysis on downstream tasks, such as substitute food extraction
- Integrated SQL and Python code for creating embeddings as a data pipeline within the internal data science library

**University of Massachusetts Amherst**

*Teaching Assistant*

Amherst, MA

Jan 2015 – May 2019

- Courses: Web Programming, Programming Methodology, Human-Computer Interaction, etc.
- Assist students on concepts and assignments during weekly office hours and discussion sections
- Test and grade both written and programming assignments

**Viasat**

*Software Engineering Intern*

Marlborough, MA

May 2017 – Aug 2017

- Implemented alert management system for cryptographic routers using Elastic stack
- Optimized Elastic stack to handle, on average, 30 times more alerts than the baseline system
- Developed Windows installer in C# for Elastic stack, packaged with an open-source security framework

## Projects

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**German-to-English Machine Translation**

- Experimented with sequence-to-sequence models such as LSTM with attention and transformers using PyTorch
- Achieved BLEU score of 34.2 (highest in class) using a 6-layer transformer model with 8 attention heads

**EleNa: Elevation-Based Navigation System**

- Developed Flask/React application to find shortest path that either maximizes or minimizes elevation gain
- Wrote unit and integration tests for front-end components and server-side logic

**Modeling Affect Intensity in Tweets | SemEval 2018 Task**

- Experimented with machine learning models (e.g. random forest, neural networks) using Scikit-Learn and Keras
- Achieved accuracy of 0.68 using a deep neural network trained on GloVe embedding features

**SoundRoom**

- Developed a collaborative playlist application in a team of six using Node.js, React, MongoDB, and SoundCloud API
- Built reusable React components to modularize dynamic portions of the front-end code
- Designed ER diagrams to model data requirements, and translated model into JSON schema in MongoDB