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Education

University of Massachusetts Amherst

Amherst, MA

Master of Science in Computer Science

Sep 2018 - May 2020

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

University of Massachusetts Amherst

Amherst, MA

Bachelor of Science in Computer Science

Sep 2014 - May 2018

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

Activities: Chair of UMass ACM chapter

Skills

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

Cambridge, MA Amazon Jan 2020 - May 2020

Applied Scientist (Machine Learning) Intern

Developed semi-supervised machine learning baselines in PyTorch in order to utilize unlabeled data for classification task

o Implemented custom feed-forward and LSTM neural networks utilizing online deep learning for streaming data classification

WW International (formerly Weight Watchers)

New York, NY

Data Science Intern

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

Amherst, MA

Teaching Assistant

Jan 2015 - May 2019

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

Viasat Marlborough, MA May 2017 - Aug 2017

Software Engineering Intern

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

Projects

German-to-English Machine Translation

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

EleNa: Elevation-Based Navigation System

- o 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

- o 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

- o 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