# Lynn Samson

### Education

#### **University of Massachusetts Amherst**

Sep 2018 - May 2020

Master of Science in Computer Science

Amherst, MA

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

# **University of Massachusetts Amherst**

Sep 2014 - May 2014

Bachelor of Science in Computer Science and Mathematics

Amherst, MA

• Coursework: Machine Learning, Probability Theory, Statistical Inference, Mathematical Modeling, Numerical Methods, Databases

## Experience

Sensor Tower Aug 2021 – May 2023

Data Scientist

San Francisco, CA

- Implemented several key improvements to the Demographics product, such as modeling population growth trends from UN population data to generate more accurate bias adjustment ratios, improving the cross-platform blending algorithm, and pushing major features such as granular demographics data to production.
- Performed custom analysis of active users estimates for key apps/cohorts during quarterly updates, in addition to solving customer queries on a regular basis.
- Owned, maintained and developed the Demographics product codebase by fixing bugs, restructuring jobs and services, writing unit tests, and implementing new features.

**Amazon** Jan 2020 - May 2020

**Applied Scientist Intern** 

Cambridge, MA

- 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** (formerly Weight Watchers)

May 2019 - Aug 2019

Data Scientist Intern

New York, NY

- 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.

**ViaSat Inc.** May 2017 – Aug 2017

Software Engineer Intern

Marlborough, MA

- 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.

# **Technical Skills**

Languages: Python, Ruby, SQL, Java, JavaScript

Frameworks and Libraries: NumPy, Pandas, Scikit-Learn, PyTorch, MongoDB

Other: Git, LaTeX

# **Projects**

# **German-to-English Machine Translation** | Python, PyTorch

- 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.

#### Modeling Affect Intensity in Tweets — SemEval 2018 Task | Python, Scikit-Learn, Keras

- 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.