# 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 Natural Language Processing (NLP), Software Engineering, Advanced Algorithms

## **University of Massachusetts Amherst**

Sep 2014 - May 2018

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

- Developed statistical demographics models using Ruby and MongoDB for the Usage Intelligence team.
- Enhanced client estimates through impactful projects, including more accurate bias adjustments and cross-platform blending algorithm restructuring.
- Led product enhancements contributing to client retention and new sales, such as demographics estimates by country and region.
- Analyzed active user estimates and presented findings during quarterly reviews and in response to client queries.

**Amazon** Jan 2020 – May 2020

**Applied Scientist Intern** 

Cambridge, MA

- Developed machine learning baselines in Python and PyTorch for semi-supervised natural language classification with streaming data.
- Implemented self-training baseline with feedforward and LSTM deep learning architectures to demonstrate SSL effectiveness.
- Researched advanced algorithms like consistency regularization and created prototypes using Hedge Backpropagation in an online deep learning context.

WW International, Inc.

May 2019 - Aug 2019

Data Scientist Intern

New York, NY

- Developed word embedding representations for food items using spaCy and FastText based on food journal data.
- Evaluated embedding performance through qualitative analysis on downstream tasks like substitute food extraction, enhancing results with internal food ontology data.
- Implemented SQL and Python code as an end-to-end pipeline in the company's data science library, and showcased work at *HealthRecSys 2019 Workshop*.

## **Technical Skills**

Programming Languages: Python, Ruby, R, SQL, Java, C#, JavaScript

Data and Machine Learning: Scikit-Learn, PyTorch, NumPy, Pandas, Matplotlib, Google BigQuery, FastText, spaCy, MongoDB

**Data Science & Miscellaneous Technologies**: Predictive Modeling, Exploratory Data Analysis (EDA), Statistics, Databases, Git, APIs, CI/CD, LaTeX

# **Projects and Publications**

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

- Implemented 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.