# 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

- Utilized Ruby and MongoDB to develop statistical demographics models and productionize estimates as part of the Usage Intelligence team.
- Delivered improved estimates to clients via high-impact projects, including accurate bias adjustments from a population growth model and a restructured cross-platform blending algorithm.
- Released several key product enhancements that drove client retention and new sales, such as demographics estimates by country and region.
- Performed custom data analysis of active users estimates and communicated results to clients, sales team during quarterly reviews, as well as in response to ad-hoc client tickets.

**Amazon** Jan 2020 - May 2020

**Applied Scientist Intern** 

Cambridge, MA

- Developed machine learning baselines in Python and PyTorch for a semi-supervised natural language classification task in a streaming data setting.
- Implemented self-training baseline using deep learning architectures (feedforward, LSTM) to prove SSL as a viable solution.
- Researched cutting-edge algorithms such as consistency regularization and developed prototypes in an online deep learning setting via Hedge Backpropagation.

WW International, Inc.

May 2019 - Aug 2019

Data Scientist Intern

New York, NY

- Created word embedding representations for food-items from food journal data using spaCy and FastText.
- Validated embedding performance using qualitative analysis on downstream tasks such as substitute food extraction, and refined results using in-house food ontology data.
- Integrated SQL and Python code as an end-to-end data pipeline within the internal data science library; work was featured in *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.