

# Lynn Samson

978-987-6196 | [lnsamsn@gmail.com](mailto:lnsamsn@gmail.com) | [linkedin.com/in/lynnsamson](https://www.linkedin.com/in/lynnsamson) | [github.com/lasamson](https://github.com/lasamson)

## EDUCATION

### University of Massachusetts Amherst

*Master of Science in Computer Science*

Amherst, MA

Sep 2018 – May 2020

### University of Massachusetts Amherst

*Bachelor of Science in Computer Science and Mathematics (Double Major)*

Amherst, MA

Sep 2014 – May 2018

## EXPERIENCE

### Data Scientist

*Sensor Tower*

Aug 2020 – May 2023

San Francisco, CA

- Developed statistical models in Ruby to analyze user demographics for mobile applications, with results stored in a MongoDB database.
- Boosted client retention and new sales through projects that improved bias adjustment accuracy, enhanced cross-platform consistency, and productionized estimates at finer granularities.
- Conducted analyses of active user estimates and presented findings, including trends and insights, to address client inquiries and support quarterly reviews.

### Applied Scientist Intern

*Amazon*

Jan 2020 – May 2020

Cambridge, MA

- Developed a semi-supervised machine learning model for natural language classification in a streaming environment using Python, PyTorch, and real-time data pipelines.
- Built and optimized self-training baselines with feed-forward and LSTM architectures, demonstrating the effectiveness of semi-supervised learning for intent recognition.
- Prototyped and validated an online semi-supervised LSTM model, integrating adaptive learning techniques such as hedge backpropagation and consistency regularization.

### Data Scientist Intern

*Weight Watchers*

May 2019 – Aug 2019

New York, NY

- Developed word embeddings for food items from food journal data, testing multiple approaches and implementing FastText for subword embeddings.
- Preprocessed and structured data using SQL (BigQuery), Pandas, and spaCy. Evaluated embeddings via substitute food extraction and recipe recommendations.
- Built and deployed an end-to-end model pipeline within the company's internal data science library, streamlining food recommendation tasks. Project showcased at *HealthRecSys 2019 Workshop*.

## PROJECTS

### Predicting Vaccination Status | Pandas, Scikit-Learn, Flask, Docker, Git, AWS

Dec 2024

- Developed and optimized multi-label classification models using XGBoost, Random Forest, and Logistic Regression, achieving a best mean AUC of 0.85 (within 1% of the top score).
- Deployed the XGBoost model as a Flask web service, containerized it with Docker, and deployed it to AWS Elastic Beanstalk, demonstrating end-to-end machine learning workflow.

### Wildlife Species Image Classification | Keras, Flask, Docker, Kubernetes, Git, AWS

Feb 2025

- Developed a custom CNN with 5 convolutional layers and 3 dense layers, optimizing parameters such as learning rate, dropout, and batch normalization, achieving 85% accuracy on test data.
- Containerized model using Docker, deployed on AWS Lambda, and exposed as a web service via API Gateway.
- Packaged model for inference using TensorFlow Serving, implemented a Flask-based gRPC gateway, and deployed to an AWS EKS-managed Kubernetes cluster using Docker Compose.

## TECHNICAL SKILLS

**Languages:** Python, Ruby, Java, SQL, JavaScript, HTML/CSS, R

**Libraries and Frameworks:** Pandas, NumPy, Matplotlib, Scikit-Learn, PyTorch, FastText, spaCy, NLTK, Flask

**Developer Tools and Cloud:** Git, Docker, Kubernetes, CI/CD, Google BigQuery, Amazon Web Services (AWS Elastic Beanstalk, AWS Lambda, AWS Elastic Kubernetes Service)