

# Joshua Tanner

NLP Engineer

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## Experience

### Research Intern

**Octanove Labs**

2020/6 - 2020/10

- Trained seq2seq models for translation and grammatical error correction using fairseq
- Implemented an ensemble of language identification models to filter data with heavy code switching

### Software Engineer

**eBay**

#### New Product Development & Global Growth

2016/11 - 2019/9

- Lead development of, tested, and maintained sole ownership of the Scala distributed scheduler that powered proactive messaging for eBay ShopBot and eBay's Chinese iPhone app
- Implemented a bootstrapping NLP process to extract informative noun/adjective pairs from product reviews, using Python and spaCy (based on "RevMiner" paper)
- Developed a Ruby on Rails web service that allowed non-technical users to customize and schedule proactive messages from ShopBot to users

### Software Engineer

**eBay**

#### Global Shipping Program

2015/9 - 2016/11

- Rearchitected the pipeline used to import shipping charge data from shipping partners, increasing the accuracy of international shipping prices on eBay's search results page by up to 40%
- Maintained and developed new features in Java/Spring services at scale (several million requests per hour), wrote tests using JUnit and Mockito
- Drove an effort to automate excessive manual operations work, saving the Global Shipping Program team tens of hours of work per week

### Intern

**eBay**

#### Global Data Infrastructure

2013/6 - 2014/9

- Owned and greatly expanded the functionality of a Ruby on Rails application automating Hadoop permissions changes and other operational tasks

## Education

### M.S. Computational Linguistics

**University of Washington**

Coursework in machine learning and natural language processing.

2019/9 - 2021/12

### Research Practicum

**University of Tokyo**

Natural language processing research at the Institute of Industrial Science.

2020/12 - 2021/12

### B.S. Computer Science

**The Evergreen State College**

Graduated early with a major in computer science and a minor in Japanese.

2012/9 - 2015/4

### Exchange Program

**University of Hyogo**

Studied Japanese language in a yearlong exchange program.

2014/4 - 2015/4

## Awards

### eBay Amplify Presenter

2018/05/7

Information extraction research I conducted as a side project was accepted for presentation at eBay's internal research conference (25% acceptance rate).

### Innovation Expo Presenter

2016/06/24

Our hackathon team's Node.js service which turned representative n-grams from web pages into affiliate links was chosen for presentation at eBay's internal innovation expo (14% acceptance rate).

### Best eBay API Integration

2013/05/26

Placed first in category among 7 teams by building a Python/Flask web application which signed into eBay and purchased random items from eBay on behalf of the user.

## Technologies

#### Proficient:

Python   spaCy  
Scala   Java  
Ruby

#### Familiar:

AllenNLP   Pytorch  
Play Framework   SQL  
Ruby on Rails

# Languages

English - Native

Japanese - Fluent (JLPT N1)

# Projects

## Parasite

2009

Developed a StarCraft 2 mod which at peak averaged two million plays per week, later onboarding another developer and two community managers to help maintain it.

## Pytext

2013

A desktop application written in Python which wraps communication with an email server and use of email to SMS gateways to allow users to participate in SMS conversations without the need for a phone number.