OLIVIA BUZEK

SENIOR ENGINEERING MANAGER

INFO

PHONE
(301) 910-3046

EMAIL
olivia.buzek@gmail.com

LINKS

Medium

Twitter

LinkedIn

SKILLS

Kubernetes

Docker

Amazon AWS

TensorFlow

Python

C++

Java

HOBBIES

aikido, hiking, raising chickens

PROFILE

Machine learning engineer turned manager with several years' experience delivering natural language processing as a service.

EMPLOYMENT HISTORY

Senior Engineering Manager , IBM Watson

Denver, CO

Jul 2019 — Present

- Managed 10 machine learning engineers, overseeing the day-to-day activities of two six-person cross-functional cloud and machine learning Agile squads.
- Led development of an internally open sourced NLP library. Coordinated integration with multiple teams delivering end-to-end NLP solutions.
- Guided the team towards an architecture that could decrease time-to-value on new machine learning features from 9 months to 3 months.
- Grew overall product team, onboarding two new remote 6-8 person teams, and bringing new engineers to make contributions to the product within a week of starting.
- Improved internal developer experience NPS score by 20 points over one quarter by addressing technical debt and architecture stability concerns.
- Coached two team members to significantly increase their technical leadership abilities and become successful scrum masters.

Engineering Manager , IBM Watson

Denver, CO

May 2018 — Jun 2019

- Led a team to update the Categories feature to switch to an unsupervised approach.
- Created a cross-product Algorithms Guild to facilitate discussion around machine learning solutions.
- Developed an Innovation Time framework where engineers can submit proposals to spend one week tackling an idea they have to improve the product, leading to beta features for explainability in Categories and adding a Summarization feature.
- Stabilized a high attrition and low morale product team, bringing turnover to effectively zero over one year.

Machine Learning Engineer , IBM Watson

Denver, CO

Nov 2015 — May 2018

- Coordinated cross-org language expansion for our product, bringing the time to a new language for all features down by 75%, down to 3 months.
- Gave an internal talk on “Linguistics for NLP System Builders” to help systems and cloud engineers understand linguistic concepts that inform the architecture of an NLP-based product.
- Updated algorithms for several NLP features to reflect state of the art algorithms, including Keywords, Entities and Concepts. Developed new Entities algorithm in TensorFlow.
- Built Python microservices for natural language processing features to replace a legacy monolith.

Forward Deployed Engineer, Palantir Washington, DC
Nov 2013 — Jul 2015

- Led technical outcomes for two large government client engagements, maintaining a user-facing data analysis stack and building front-end data analytics solutions.
- Improved multiple inherited Java-based data integrations. Reworked some to use more modern (internal) libraries and improved error handling, logging and stability of data flow for users.

Graduate Student Researcher, Johns Hopkins University Baltimore, MD
Jun 2011 — Jun 2013

- Designed a probabilistic graphical model in Java based on the Latent Dirichlet Allocation topic model for text analysis. Used model to predict personality traits for a dataset of Facebook status posts and stream-of-consciousness personal essays.
- Investigated linguistic cues in Twitter data to build a prediction system in Python for a user's likely schedule. Developed a definition of unexpected travel by social media users who report their geolocation. Designed a detector for language that might indicate future travel.

Undergraduate Research Assistant, University of Maryland Institute for Advanced Computer Studies College Park, MD
Nov 2009 — Jun 2011

- Developed and coded an algorithm in Ruby to identify difficult-to-translate spans of a source sentence in the context of machine translation.
- Improved runtime efficiency and pruned search space for exponential algorithm to generate alternate sentence phrasings, significantly decreasing the cost of running the experiment. Education

EDUCATION

Johns Hopkins University Baltimore, MD
Sep 2011 — Jun 2013

Graduate coursework in Natural Language Processing and Machine Learning

B.S. Computer Science, University of Maryland College Park, MD
Sep 2007 — Jun 2011

College Park Scholars Program - Sept 2007 - June 2010

REFERENCES

References available upon request