## SHUBHAM GONDANE

shubham18.g@gmail.com | 480-278-5069 | linkedin.com/in/shubhamgondane

### **SUMMARY**

Computer science graduate student with a passion for machine learning, likes to take initiative to tackle hard challenges, with research experience building machine learning systems. Seeking opportunities where I can leverage my skills and experience and contribute to the organization in a collaborative and learning environment.

#### **EDUCATION**

## **Master of Science in Computer Science**

Arizona State University, Tempe, Arizona

**Bachelor of Technology in Computer Engineering** 

Vishwakarma Institute of Technology, Pune, India

cville

**GPA: 3.5/4.0** August 2013 - May 2017

Graduating December 2019

GPA: 3.8/4.0

#### **SKILLS**

- Programming: Python, SQL, Java, Linux, R
- Frameworks and tools: MongoDB, AWS, Spark, Keras, Pytorch, TensorFlow, Git, Scikit-learn, NLTK
- Certifications: Deep Learning Specialization by deeplearning.ai

#### **WORK EXPERIENCE**

#### Data Science Aide, Arizona State University

February 2019 - current

- Implemented various Text mining models (i.e., TF-IDF, LSA, GloVe, Doc2Vec, LDA, PLSA, BERT) to analyze content novelty on Reddit.
- Developed a semantic network-based system to investigate content creativity. This research has been accepted by a premium international conference ICIS in the field of Information Systems and will be presented in Germany in December.

# **Graduate Research Assistant, Arizona State University**

January 2019 – October 2019

## MS Thesis successfully defended on November 5th

- Developed a generalizable system using BERT a language model to identify personal health experience mention in tweets across different health domains. The system came in second out of 19 submissions at SMM4H workshop at ACL 2019 conference.
- Developed a deep learning system using language models and transfer learning to automatically classify and perform named entity extraction of adverse drug reaction mention in tweets.

# Research Assistant, Arizona State University

December 2018 - April 2019

- Designed a machine learning system for a research project to study the Impact of Impression Management on Academic Program Reputations on social media.
- Designed a data processing pipeline for data collection, preprocessing, and feature engineering. Improved four different machine learning SVM models with accuracies of 83 to 91 percent.

# **ACADEMIC PROJECTS**

# **Co-reference resolution in Electronic Health Records**

February 2018 – April 2018

- Designed a model to find co-referring concepts in medical reports using natural language processing.
- Developed a pipeline to annotate concepts using off-the-shelf tools and libraries and form concept pairs.
- Implemented feature engineering to extract important features to work with an SVM classifier to identify valid co-referring pairs. Developed an algorithm for combining the co-referent pairs into a valid co-referring chain.

# Image recognition as a Service on AWS

February 2018 – April 2018

- Developed an elastic application on AWS for image recognition using a deep learning model. Developed a PHP application to handle the end-user interaction.
- Developed Java programs to interact with and provide cross interaction between different AWS resources like EC2, S3, SQS, and CloudWatch to manage the data flow. Implemented a load balancing algorithm to automatically scale in and out on demand and in a cost-effective manner.
- Reduced time overhead by 2 minutes by modeling EC2 instance metrics data.

# **Geospatial Hotspot Analysis**

February 2018 - April 2018

- Implemented a Hadoop cluster on AWS to execute geospatial queries like Range, Join, KNN using SparkSQL.
- Performed Operational tests by varying load and cluster configurations.

#### **PUBLICATIONS**

Gondane, Shubham. "Neural Network to identify personal health experience mention in tweets using BioBERT embeddings." In Proceedings of the Fourth Social Media Mining for Health Applications (# SMM4H) Workshop & Shared Task, pp. 110-113. 2019.