# **Shuyang Li**

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#### **EDUCATION**

University of California, San Diego, San Diego, CA (PhD)

Exp. 2023

Area: Computer Science and Engineering, Machine Learning

Princeton University, Princeton, NJ (BSE)

June 2016

Major: Operations Research and Financial Engineering

GPA: 3.71

Certificates: Applications of Computing; Statistics and Machine Learning

Thesis: Exploring Rich Features for Sentiment Analysis with Various Machine Learning Models

#### RESEARCH AND WORKING EXPERIENCE

# University of California San Diego, AI Lab

September 2018-Present

Graduate Student Researcher

- Designed and researched models for structured text generation and data-to-text natural text generation
- Researching models for dialogue generation and recommender systems under Professor Julian McAuley

## Google, Kaggle Datasets (Google Cloud AI)

June 2019-September 2019

Software Engineering Intern

- Built a framework for automatically generating semantic tags for datasets based on free-text metadata
- Implemented metrics for dataset discoverability and search success
- Doubled size of tag ontology and tripled tag coverage across all public datasets on Kaggle.com

### **Bloomberg, Structured Products Waterfall**

June 2017-September 2018

Senior Software Engineer

- Designed and helped implement a Spark-based infrastructure for high bandwidth data processing jobs.
- Modeled time series data for 2.5 million asset-backed securities (ABS).
- Designed and implemented anomaly detection for ABS data passing through ETL and analytics pipelines.

## Goldman Sachs, Operations Automation and Analytics Technology

July 2016-June 2017

Technology Analyst

- Helped build an application to consume, parse, & standardize market messages for fixed income instruments.
- Worked with a team to design and build a machine learning platform to generate and recommend metrics and predictive models for datasets in the Operations space.

#### **Princeton University, Senior Thesis Research**

September 2015-May 2016

Senior Thesis Research

- Investigated SVMs, Naïve Bayes, and ensemble methods for binary sentiment analysis on movie reviews.
- Generated rich feature set with semantic features to capture sentence ordering patterns in human writing.

## **Goldman Sachs, Operations Analytics Strategies**

June 2015-August 2015

Summer Analyst

• Led team working on automated invoice recognition using Tesseract and Python to process and automate template matching with noisy and tilted images containing structured and semi-structured text.

### Princeton Laboratory for Energy Systems Analysis / CASTLE Lab

June 2014-August 2014

Summer Research Intern

- Created simulator in Java for the unit allocation problem of introduction of wind energy to the power grid.
- Analyzed the role and performance of different classes of learning rates in reinforcement learning.

#### SELECTED PUBLICATIONS

Majumder, B.\*, Li, S.\*, Ni, J., McAuley, J. (2019). Generating Personalized Recipes from Historical User Preferences. *Empirical Methods in Natural Language Processing*.

Huang, D., Li, S., Dhaka, A., Story, G.M. and Cao, Y.Q., 2012. Expression of the transient receptor potential channels TRPV1, TRPA1 and TRPM8 in mouse trigeminal primary afferent neurons innervating the dura. *Molecular pain*, 8 (1), 66-85.