## SHIYI SHEN

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#### **EDUCATION**

Brandeis University Waltham, MA

MS in Computational Linguistics | GPA: 3.67/4.0

May '22

**Coursework**: Fundamentals of NLP Iⅈ Stats NLP; Informational Retrieval; Fundamentals of Artificial Intelligence; Natural Language Annotation for Machine Learning; Syntactic Theory; Semantics: Truth, Form, and Meaning; Data Structures and the Fundamentals of Computing; Advanced Programming in Java **University of Pittsburgh**Pittsburgh, PA

University of Pittsburgh

BA in Linguistics, Anthropology, and Japanese Studies | GPA: 3.60/4.0

July '18

**Coursework**: Intro to Computational Linguistics; Syntactic Theory; Linguistic Variation and Change; Applied Linguistics; Pragmatics of Japanese; Language and Media of South Asia; Intro to Translation in Japanese;

### **SKILLS AND ACHIEVEMENTS**

**Programming languages:** Java; Python | **Languages:** Mandarin Chinese(native); Japanese(advanced) **Platforms and Tools:** Tensorflow; Pytorch; Open AI; Jupyter Notebook; Github; Emacs; Vim; Textmate; Visual Studio; NLTK; Pynini; Scikit learn; Pandas; Anaconda; Homebrew

Achievements: Awarded with 50% funding for graduate studies in computational linguistics

Full tuition remission with SEALS scholarship for intensive language training

May '14

### PROFESSIONAL EXPERIENCE

# Beth Israel Deaconess Medical Center | Harvard University

Boston, MA

Bio-NLP Researcher

· bio-markers extraction: finished a project on bio text-mining and bio-markers extraction leveraging RNA/DNA data of patients with pancreatic ductal adenocarcinoma (PDCA) and understood the basics and contribution of cancer prognosis and treatment predictions.

Lobos Management Pittsburgh, PA

Bilingual Office Assistant

Oct 2017 - Dec 2017

· data entry and maintenance: maintained important credentials and real estate data in the filing system.

Created a coding system for the benefit of organizing billing information. Handled bilingual emails and tasks.

### **PROJECTS**

# **Sentiment Analysis with Movie Reviews on IMDb**

Utilized Google pre-trained word2vec model to preprocess data and K-means to locate the center words and SVM to do classification, after cross-validation, and the F1 Score on test data reaches 0.65

# **Logistic Regression Movie Review Classifier**

Tuned parameters for LR model with cross validation for classifying movie reviews, roc auc attains 0.773 **NER with Conditional Random Fields (in Mandarin Chinese)** 

Improved conditional random fields model for NER in Mandanrin Chinese; obtained F1 Score 0.96 **HMM POS Tagger with Finite State Transducers** 

Built a HMM POS tagger backed by FSTs for Brown corpus; prediction result obtained F1 of 0.92