# **JIE WANG**

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### **EDUCATION**

Master of Science Computer Science Expected Graduation: May 2022

University of Colorado Boulder

Bachelor of Science Computer Science GPA: 3.4

University of Colorado Boulder Anticipated Graduation Date: May 2020

*Related coursework:* Data Structures, Computer Systems, Software Development Tools, Discrete Structures, Algorithms, Introduction to Robotics, Human Center Design, Machine Learning

## TECHNICAL SKILLS

Programming Languages: Python, C++, Basic JavaScript, Scala, HTML5, CSS, Basic SQL Tools: Git, Linux, Remote Server, Pytorch, Sublime, Juypter Notebook, Arduino

Software/Other: Quality assurance, Adobe Photoshop, Microsoft Office (Word, Excel, PowerPoint)

## **ENGINEERING EXPERIENCE**

Research Assistant, NLP Lab, CU Boulder

Aug. 2019 – Present

- Built classifier to predict which tweet will be retweeted more by using BERT language model
- Tested performance of different encoding methods by scientific experiment method
- Achieved 69.4% accuracy with new **classifier** compared with 66.5% cross validation accuracy in original paper by Chenhao Tan

### **ENGINEERING PROJECTS**

Sentiment Analysis Based on BERT, Independent Study, CU Boulder

Jan. 2019 – May. 2019

- Reproduced by LSTM using Tensorflow and tested on Juypter Notebook
- Replicated sentiment analysis using BERT
- Conducted experiments to understand relationship between hyper-parameters

Predicting retweets Based on BERT Independent Study, CU Boulder

June. 2019 – Present

- Trained a binary classifier by using pytorch-transformer from huggingface
- Understood and analyzed the theory of BERT's tokenization and encoding

Suicide prediction Based on BERT, Data Mining (Audited), CU Boulder Aug. 2019 – Dec. 2019

- Collaborated with data mining group and built a classifier based on BERT
- Analyzed the data set and implemented 97.8% dev accuracy based on data from weibo

## Game building on hardware, Independent Project

Aug. 2018 – Sep. 2019

- Soldered transistors, LED and switch button on PCB board to build a programmable platform
- Programmed on Arduino in C to control the display and built T-Rex game on hardware.

### LEADERSHIP EXPERIENCE

Co-Founder, Wechat (Trade Tech Company), Stanford University

June. 2018 – Present

- Wrote front-end using Wxml, Wxss, and JS to buy and sell second-hand items on trade platform
- Provided service to University of Colorado Boulder, Colorado State University, University of Iowa, Pennsylvania State University. The number of users has achieved 3,400 until Nov 2019

Math Tutor and Learning Assistant, Department of Mathematics, CU Boulder Aug. 2018 – Present

• Assisted college student in calculus, linear algebra homework at Math Academic Research Center Taught pre-calculus course, enhancing communication skill and teaching ability