Wang, Zian

Nationality: Chinese | DOB: 11/09/1997 | Phone: +1 917-348-4672 | Email:ziawang@cs.stonybrook.edu

Personal page: zianwang.com

EDUCATIONAL BACKGROUND

Department of Computer Science, Stony Brook University   08/2023-Present
- **Major:** Computer Science
- **Degree:** Ph.D.

School of Computing and Information, University of Pittsburgh   01/2021-01/2023
- **Major:** Information Science
- **Degree**: Master's Degree
- **Overall GPA:** 3.981/4.0

School of Artificial Intelligence, Hebei University of Technology   09/2016-06/2020
- **Major:** Computer Science and Technology
- **Degree**: Bachelor's Degree
- **Overall GPA:** 3.43/4.0
- **Second Major:** Information and Computing Science

RESEARCH EXPERIENCES

Prediction of Food Crisis in Africa   06/2022-Present
- Collect Spatio-temporal data and events news of several countries in Africa into our dataset.
- Build several models to predict the country-level Integrated Phase Classification (IPC) of food insecurity in Africa based on the dataset.
- Paper has been submitted to BFNDMA 2023.

A New Computationally Efficient Method to Tune BERT Networks – Transfer Learning 04/2022-09/2022
- A project proposes that transfer learning is a more computationally efficient way to tune the pre-trained BERT models.
- Conducted experiments on tuning pre-trained BERT models by transfer learning and compared the training time and performance scores.

Wrote a paper on this project as the sole author and has been accepted by CONF-SPML 2023.

Bayesian Optimization Review   12/2021-2022/07
- Review basic concepts of Bayesian optimization.
- Apply Bayesian optimization to benchmark functions from one dimension to multiple dimensions, and from unimodal to multimodal.
- Test the influence of different acquisition functions and other factors involved.

Tweets Sentiment Analysis   12/2021-05/2022
- Analyze and classify the tweets based on sentiments.
- Use and compare many embedding methods and many models.
- Finally use modified GRU and LSTM DNN as the best two models to do classification, the accuracy can reach 78% compared to 55% in many related works.

Police Union Contract Misconduct Complaint Detection   09/2021-01/2022
- Detect unfair misconduct terms in the police union contracts.
- Removing errors, preprocessing, embedding, and building several models, includes Random Forest, Neural network, LogitBoost, SLDA, and SVM.
- Use ensemble to improve performance of our system, recall up to 98% can be achieved.

CAASI Allegheny County Policing Project   08/2021-01/2022
- A project that aims to make police contracts more transparent to the people.
- Working as a technique team member in Dr Yuru Lin's PICSO lab of the University of Pittsburgh, responsible for building the police dept map, and display the data.
- Gained full-stack development experience.

Complex System Performance Prediction   01/2021-05/2021
- A project to predict the performance of a complex system in the industrial domain.
- Build several regression and classification machine learning models to predict the performance and to optimize the system to have minimal probability of failure.

- Include preprocessing, training, testing, optimizing steps.

A Steel Price Analysis System based on Data Visualization (Graduation Project)　　01/2020–05/2020
- Design, code, test, and complete independently throughout the process
- Crawl the necessary price data from public websites
- Build and use ARIMA model to analyze and predict the prices of steel in a short period of time in the future

BIM-based Intelligent Building Cloud Platform　　11/2017-06/2018
- Participated in the design of database and the construction of database architecture
- Responsible for the preparation of data presentation page and other technical work
- Collected the data required by the project and checked and processed the project data

Visual Analysis of Global Game Sales Data from the 1980s to the Present　　05/2019-06/2019
- Conducted visual analysis of the sales data of global top five game manufacturers in each year by using Tableau
- Gained information about the changes in top five game manufacturers in the world and the changes in sales data of vendors

INTERNSHIP

Aurora Mobile Limited, Shenzhen, Guangdong | *Basic Data Department Intern*　　07/2019-08/2019
- Responsible for updating the app information with no tags in the Hive library, tagging them and putting them into storage
- Learned the cutting-edge technology of data mining and big data analysis
- Got a better understanding of how to mine the wanted data in the data warehouse and how to classify it

OTHERS

Language Skills: Chinese (native), English (CET-4, CET-6, TOEFL 98, GRE 320)

Programming Skills: Most often use Java, Python, and R. Familiar with SQL, Matlab, C and C++. Built websites with Django+React. Have experience with hadoop(Code MapReduce programs).

Certificate: National Computer Rank Examination (Level-4)

Go Grading-Five Certificate (Highest Rank in Hebei Province)