

LINLIN(KAREN) YU

TEL(+86) 15821861196 ◇ yulinlin0828@gmail.com

EDUCATION

Shanghai Jiao Tong University(SJTU)

Sept. 2015 - June 2019(expected)

B.S. in Information Security ,School of Electronic Information and Electrical Engineering

Overall GPA: 85.36/100

RESEARCH INTERESTS

Natural Language Processing
Data Science

Machine translation,Natural language understanding and so on
Data mining and Information Retrieval

RESEARCH &PROJECTS

The improvement work of Chinese Segmentation Model

May 2018 - Present

BCMI-NLP lab in SJTU

Advisor: Prof.Hai Zhao

- Built a universal Chinese word segmentation for different open corpus and added some rules to the segmentation results to meet different segmentation rules.
- Reproduced the work that Modeling Named Entity Embedding Distribution into Hypersphere and applied it to the NER(named entity recognition) .
- Used NER and semantic analysis to improve the efficiency of the neural word segmentation.

Alias method and MH based acceleration algorithm

July 2016 - May 2017

for Biterm Topic Model

Advisor: Dr.Xingwei He

- Implemented Biterm Topic Model (BTM) using java code as baseline
- Conducted some experiments of our new algorithm to verify its efficiency.
- Fast BTM successfully reduces sampling complexity of BTM from $O(K)$ to $O(1)$.

The optimization of Blockchain confidential Transaction algorithm. Sept. 2017 - Mar. 2018

Shanghai Jiao Tong University PRP project

Advisor: Prof.Xuejia Lai

- Improved the operation efficiency and performance of the algorithm by optimizing the Homomorphic Encryption, Range Signature and Range Proof algorithm in the confidential transaction.
- Set up a network using Hyper Fabric platform to realize some Blockchain services such as transaction and query, followed by building the application.

House price forecasting model in Shanghai

May. 2018 - June 2018

Course project in Data Ming class

Advisor: Prof. Lei Fan

- Used Scrapy Framework to get more than 70,000 pices of house information including 7 atrtributes and price in Shanghai ,and then used CRF++ tools to do chinese segmentation work.
- Exploited machine learning algorithms including linear-regression, decision Tree ,Random Forest and XGBoost after data preprocessing including data cleaning and decoding.Adjusted the parameters in the XGBoost model for the best performance.

Android application development

Feb. 2018 - June 2018

Course project in Softwear Engineering

Advisor: Prof. Haitao Liu

- Developed a multi-functional calculator in the Android using Java,which can do math calculation ,unit conversion and currency converter.

- Designed a restaurant management system containing SQL database via UML Model for window PC terminals.

Other Course Projects

Jan. 2017 - Dec. 2017

- Developed a multi-user chat program with server and client front using Python and Socket.,which realize real-time online user prompts and data transmission in any form such as text messages,files,emojis and pictures .
- Designed and developed some pages for students to create and query activities with the help of WeChat Official Account platform and MySQL.

PUBLICATION

Xingwei He, Hua Xu, Jia Li, Liu He,**Linlin Yu** FastBTM: Reducing the Sampling Time for Biterm Topic Model Knowledge-Based Systems(KBS), vol. 132, pp. 11-20, 2017. (IF: 4.529)

HONORS&AWARDS

National Endeavor Fellowship of Shanghai Jiao Tong University for 2016 academic year

Second prize of National High School Mathematics League in 2014

Second prize of Chinese Physics Olympiad in 2014

RELEVANT COURSES

Computer Science

Data Mining(89)
Introduction to Artificial Intelligence
Computer Organization and Architecture(93)
Data Structure and Algorithms(83)
Principles of Database(91)
Operating System
C++ Python Verilog

Math&Security

Mathematic of Information Security(94)
Windows Security Theory And Technique(90)
Modern Cryptography
Probability and Statistics
Linear Algebra
Mathematical Analysis
Mathematical Methods in Physics

SKILLS

Proficiency in programming languages such as C++, Python and familiar with PHP and Java.

Familiar with machine learning algorithms such as LR, Nave Bayes and Random Forest.

Familiar with neural networks such as CNN, RNN, LSTM.

SOCIAL ACTIVITIES

Director of Student union in SJTU

Aug. 2015 - Mar. 2017

- Planned and organized various Debate competitions and DataBang Competitions.

Volunteer

Apr.2016 & Oct. 2016

- Volunteered in the Shanghai International Marathon and Shanghai International Half Marathon.