YAOYAO QIAN

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EMPLOYMENT

Zhejiang Chongxiao Zhong Han Medical Technology Co   May 2020 - September 2021
Technical Manager

- Independently developed a VC++-based DBI tool from scratch for exporting and importing from Access to Oracle, improving deployment efficiency by 30%
- Independently developed a Springboot+Vue e-invoice management system interfaced with the hospital system, improving business efficiency by 80%
- Built a development team from scratch and led the development of an internal management system based on the company's business; responsible for writing key code and controlling code quality and project progress

EDUCATION

Wenzhou University of Technology   September 2016 - June 2020
B.Eng. in Computer Science

- GPA: 3.69/4.00 (Top 5%)
- Advisor: Dr. Xu Xu
- Thesis: Dynamic Simulation Model of Airport Taxi Optimal Allocation
- Relevant Courses: Python Programming (96), Java Language Programming (96), Linear Algebra (94), JavaScript Language (99), Web Applied System Development (97) , Mathematical Modelling and Experiments (95)

PUBLICATIONS

- **Yaoyao Qian** and Xianming Wang, "Analysis of Football Game Performance Based on Social Network," International Conference on Cloud Computing, Big Data and Digital Economy (ICCBD 2021), 2021.

RESEARCH EXPERIENCE

Jingdong referral team, Beijing, China   June 2020 - Present
Research Cooperation

- Research Direction: NLP
- Research on Named Entity Recognition

University of Connecticut, Connecticut, USA   June 2020 - Present
Research Assistant to Dr. Wei Zhang

- Research on distributed machine learning systems

Wenzhou University of Technology, Wenzhou, China   April 2020 - May 2020
Research Assistant to Dr. Xianming Wang

- Analyzed impact factors of soccer teams strategies based on soccer game records
- Conducted analytical modeling of contest records using social networks and degree centrality
- The analysis of the Huskies and related soccer games revealed that teams were more focused on coordination and communication than individuals

Institute of Modeling and Data Mining, Wenzhou, China   July 2019 - December 2019
Research Assistant to Dr. Xu Xu

- Collected shopping site reviews from Amazon using BeautifulSoup
- Conducted sentiment analysis on the corpus using Textblob and
- Created a user profile of the commenters using Wordcloud

Wenzhou Bopu Institute of Big Data, Wenzhou, China September 2018 - January 2019
Technical Leader, Supervisor: Dr. Xianming Wang

- Conducted public opinion analysis based on news content crawled from Wenzhou News Network
- Dictionary-based sentiment analysis
- Implemented knowledge graph presentation by structuring a single news article
- Used TextRank4ZH for news topic word extraction and topic "hotness" visualization

PROJECTS

Legal Text NER Project July 2021 - July 2021
Independent Project (https : //github.com/H − Freax/BiLSTM − CRF_Law)

- Named Entity Recognition for Legal Text-Based on Pytorch with BiLSTM + CRF
- Achieving 88% accuracy on test set

Law Law July 2021 - July 2021
Independent Project (https : //github.com/H − Freax/LawLaw)

- Question and answer bot based on legal-like question and answer dataset - based on Pytorch
- Using Seq2Seq model, Encoder uses two-layer bidirectional GRU, Decoder uses two-layer unidirectional GRU

Data Analysis of Lending Club April 2021 - May 2021
Independent Project((https : //github.com/H − Freax/lengdingclub_analyses)

- Derived variables were generated by clustering the variable number of open lines of credit in the borrower's credit file based on Lightgbm as a baseline, which improved the accuracy from 91.56% to 91.84%.
- The overlay fusion of GBDT, lightgbm, and three-layer DNN by Stacking achieved an accuracy of 91.84%.

Bristol-Myers Squibb − Molecular Translation April 2021 - May 2021
Independent Project (Kaggle 88/874, top11%)

- Converted images back to the underlying chemical structure annotated as InChI text
- Used Resnet101d as the encoder, Transformer as the decoder, and Ranger Optimizer as the optimizer
- Achieved a loss rate of 0.4% on the validation set, an average edit distance of 6 on the validation set, and an average edit distance of 1.88 on the test set

Ming Law January 2019 - May 2019
Independent Project

- Built a legal platform based on big data and artificial intelligence technologies
- Public opinion analysis model: CNN was used to integrate word vectors for news classification, with an accuracy of over 93%; Echart was integrated to visualize the changing law of legal hot spots
- Intelligent text error correction model: built an N-gram model to check whether there were errors, establish confusion set for sorting, and took the result of highest score after error correction; trained and evaluated the model on a large legal document database
- Q&A service: used semantic similarity weighted scoring strategy for Q&A; trained and evaluated the model on a large legal Q&A database

Yao Yi Yao October 2018 - October 2018
Technical Leader, in Collaboration with Beijing University of Chinese Medicine

- Built an application for recommending OTC proprietary Chinese medicine based on clinical symptoms for evidence type judgment
- Integrated main clinical symptoms and evidence types of common over-the-counter Chinese medicines based on literature in the Chinese Science and Technology Journal Full Text Database
- Implemented a recommendation algorithm based on logistic regression of the input clinical symptoms

AWARDS AND HONORS

- Distinguished Employee, Zhejiang Chongxiao Zhong Han Medical Technology Co, 2020
- Outstanding Graduates of Zhejiang Province (5%) ,2020
- Gu Chaohao Scholarship (1 out of 8773, 0.01%), Wenzhou University, 2020
- University Student Science and Technology Innovation Star (1 out of 8773, 0.01%) , Wenzhou University, 2020
- Honorable Mention Award, Mathematical Contest In Modeling (MCM), 2020
- Meritorious Winner, Mathematical Contest In Modeling (MCM), 2019
- Third prize (two times), Zhejiang Province E-commerce Competition, 2018-2019
- First Prize, 12th National Student Electrical and Mathematical Modeling Competition, 2019
- Zhejiang Provincial Government Scholarship (3%), 2017-2019
- Outstanding student leaders, Wenzhou University, 2017-2019
- First Class Scholarship (5%), Wenzhou University of Technology, 2016-2019