Ye Tian

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No.2500 Songhuajiang RD, Hongkou District, Shanghai

Education

Fudan University, Shanghai Sept. 2018 – Present

Bachelor of Electronic Science and Technology (Honor Class)

GPA: 3.68/4.00 (Total), 3.78/4.00 (Second Year)

Ranking: 9/225

Course: Pattern Recognition and Machine Learning (A), Data Structure and Algorithm (A), Programmable Device and Hardware Description Language (A), Microcomputer Principle and Interface Technology (A)

Honor: 2018∼2019 Outstanding Student of Fudan University, 2018∼2019 Second Prize Scholarship, 2019∼2020 First Prize Scholarship (Huawei Scholarship), 2019 Fourth Place of Faculty Cup Table Tennis Competition

Academic Experience

Fudan MediaNET Jan. 2021 – Present

- Design a SQL machine learning system of Apache Drill, design the basic working class of *Learner* and convert Drill's single round query into iterative computation
- Develop the machine learning library of Apache Drill, now supports linear model, logistic regression, KNN model and decision tree model
- Design the serialize and deserialize process of machine learning models based on Google Protocol Buffers, improve the efficiency of model parameter transmission on the Internet
- Make the system capable of uploading trained model to IPFS network and compatible with future federated learning systems

Wang Dao Project (FDUROP) Jul. 2020 – Present

- Propose domain adaption algorithm combined with Markov Random Field (MRFs) that minimizes self-defined energy on source domain and target domain, utilize spatial information of hyperspectral images to define cluster on MRFs
- Carry out experiments on hyperspectral datasets and toy datasets, analyse results and pass the interm report

Course Projects

Drug Property Prediction *Pattern Recognition and Machine Learning*

- Review existing property prediction approaches and give report *Property Prediction Briefing* in class
- Build Self-Attention LSTM model and the basic framework of the program, provide commandline options for training and evaluating models and data preprocessing functions

Reproduce and improve JPEG2000 *Digital Signal Processing*

- Devise scalable, zero config and multiprocess acclerated framework for implementing image processing algorithms and provide profound command line interface for external programme calling
- Implement color transform, tiling and quantizing, cooperate with classmate to implement EBCOT encoding and wavelet transform

Skills

Programming Languages: Java, Python, MATLAB, Shell, C/C++, Golang, Julia, Assembly, LaTeX
Research Skills: Coding, literature review, mathematical modeling, data cleaning, experiment result analysing
Language Ability: TOEFL IBT 98, CET-6 612