Li, Zhiping

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Education

Tongji University **Sep. 2011 – Mar. 2014**
M.E. in Electronic and Information Engineering, Control Theory and Engineering *Shanghai, China*

Thesis: EEG Based Seizure Prediction of Epilepsy Patients

Nanchang Hangkong University **Sep. 2007 – Jul. 2011**
B.E. in Information Engineering, Automation *Nanchang, China*

Research Interest

- I am interested in deep learning algorithms in general areas such as predictive modeling, causal inference, and Bayesian-optimized models to resolve bioinformatics topics.
- Multimodal applications and the combination of medical data to conduct high inference quality over medical diseases.

Selective Courses

- Pattern Recognition (94/100)
- Advanced Artificial Intelligence (92/100)
- Discrete Event Dynamic Systems (94/100)
- Complex Functions (94/100)
- Database and Application of Principles(92/100)
- Modern Control Theory(99/100)
- Electrical Control Technology(93/100)
- Digital Signal Processing B(92/100)
- Speech and Eloquence Theory(100/100)

Research Publication

Li, Zhiping. Multi-channel Seizure Prediction Based on Support Vector Machine[J]. Computer Engineering, DOI: 10.3969/j.issn.1000-3428.2014.02.043.

Research Experience

Prediction of epileptic seizure through machine learning and bio-engineering **Sep. 2011 – Mar. 2014**
Research Assistant *Advisor: Wei Zhang*

- Studied whether epilepsy is predictable by proving that we can predict the time of the next occurrence after it happened last time.
- Conducted the prediction through independent component analysis and support vector machine.
- Investigated the multichannel synchronization feature in terms of nearby synchronized topology structure of channel graphs
- Evaluated our experiments on datasets from the University of Freiburg, Germany Prediction Center, achieving a sensitivity of nearly 0.99 and a false positive rate ranging from 0.18 to 0.3 with 0.004 min - 89.833 min before epilepsy happens, providing guidance for future systems.
- Further proposed a wearable device, which was later shown to have practical usage in real life.

Professional Experience

Ant Group Co., Ltd. **Oct. 2021 – Nov. 2022**
Algorithm Expert *Shanghai*

- Managed a team to develop and iteratively update a recommending financial product on the Alipay App, boosting the conversion of non-Vanguard clients into Vanguard clients.
- Explored and implemented models based on the Entire Space Multi-Task Model.
- Incorporated developed models into the Alipay App and conducted online experiments at a 10% scale.
- Increased the product click-through conversion rate (CTCVR) by **15%** and improved Unique Visitor(Gross Merchandise Value/Visitor Numbers) by **26%**, and set the products online.

One Hundred Meter Network Technology Co., Ltd. (Ding Dong) **Mar. 2021 – Oct. 2021**
Senior Algorithm Engineer *Shanghai*

- Led the group and managed resources to develop a long-term interest model and a short-item interest model based on the Controllable Multi-Interest Framework for Recommendation.
- Incorporated modules into the Ding Dong shopping app.
- Increased the click-through rate by **10%** based on the long-term interest model, increased the click-through rate by **35%** based on the short-term interest model, and set the models online.

Baidu(China) Co., Ltd. **Jun. 2017 – Sep. 2019**

Senior Algorithm Engineer *Shanghai*

- Led the project on behavior scoring models to predict individual credit risk based on customers' behaviors.
- Explored Seq2Seq models with bi-LSTM structure and attention mechanism, in order to generate effective behavioral sequences aimed at reducing bad credit rates.
- Extracted embedding vector features from models and integrated them into credit risk models.
- Validated online with small-scale traffic and achieved a Kolmogorov-Smirnov gain of **2%**.
- Led the Feature Mining project to enhance the Shared Feature Library.
- Explored and formatted data from various databases, including Baidu Map data, Baidu Forum data, and other mobile device data.
- Explored embedding features using models such as DBSCAN, Word2Vec, TextCNN, etc.
- Analyzed the effectiveness of features in mitigating credit risk, observing a Kolmogorov-Smirnov gain of **3%**, and incorporated them into the shared feature library.

Hua-Rui Bank(Shanghai) Co., Ltd. **Dec.2015 – Jun. 2017**

Data Algorithm Engineer *Shanghai*

- Participated in developing projects to define metrics, including bad debt rate, overdue rate, fund rotation rate, etc.
- Preprocessed the data by addressing missing values and outliers, then conducted data analysis, including feature variable selection, binning, and the calculation of Weight of Evidence (WOE) and Information Value (IV).
- Analyzed data and constructed models using the Logistic Regression Model.
- Contributed to build a recommendation system for financial products.
- Analyzed customer channels and other features to group them into clusters.
- Implemented GBDT+LR models for new customers and utilized Item-based Collaborative Filtering for mature customers and explored effective user segmentation methods to enhance conversion rates.
- Increased click-through rate by **10%** and post-click conversion rate of new customers by **2%**.

Skills

Python, Matlab, C, SQL, Unix/Linux, TensorFlow, Paddle-Paddle

Awards and Certification

Awards and Achievements

- Outstanding Student Scholarship, Nanchang Hangkong University awarded to **5%** students. **2007, 2008**
- **Top Ten** Students of the University, Nanchang Hangkong University. **2010**
- **Second Prize**, Outstanding Student Scholarship, Nanchang Hangkong University. **2007**
- National Mathematical Modeling Competition awarded to **5%** students. **2010**
- Outstanding Student Scholarship, Tongji University awarded to **5%** students. **2012**

Certification

- ***Algorithms*, Authorized by Stanford University through Coursera.**
- ***Deep learning*, Authorised by Deeplearning.AI and Andrew Ng through Coursera.**
- ***DeepLearning.AI TensorFlow Developer*, Authorized by DeepLearning.AI and Google through Coursera.**
- ***Fundamentals of Reinforcement Learning*, Authorized by University of Alberta and Coursera.**