# LI, ZHIPING

1800 Longyang Road, Pudong New District, Shanghai

### 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

B.E. in Information Engineering, Automation

Sep. 2007 - Jul. 2011

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 Zhana

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

Shanahai

- 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.

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

Shanahai

- 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

• Winner, Outstanding Student Scholarship, Nanchang Hangkong University awarded to 5% students.	2007, 2008
• Nominator, Top Ten Students of the University, Nanchang Hangkong University.	2010
• Winner, Second Prize, Outstanding Student Scholarship, Nanchang Hangkong University.	2007
• Winner, National Mathematical Modeling Competition awarded to $5\%$ students.	2010
• Winner, 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.