LI Ruixian

+ (86) 131-2218-7687 | liruixian@sjtu.edu.cn

EDUCATION

Shanghai Jiao Tong University   Sept 2019-Jun 2022

M.Phil in Industrial Engineering

GPA: **3.68/4**

Shanghai Jiao Tong University   Sept 2015-Jun 2019

B.Eng in Industrial Engineering, Minor in Business Administration

GPA: **3.66/4.3**

PUBLICATION

- **Li, Ruixian** et al. (2021). Intelligent Bearing Fault Diagnosis Based on Scaled Ramanujan Filter Banks in Noisy Environments [J], *IEEE Transactions on Instrumentation and Measurement* (under review).
- HUANG, Jing, **LI Ruixian**, and MIAO Rui (2017). Analysis and Countermeasure Research on Plan Issues of Heavy Lift Crane Pontoon Project [C] *DEStech Transactions on Engineering and Technology Research amme*. ISSN: 2475‑885X.
- WANG Litao, **LI Ruixian** et al. (2017). The Efficient Combination of Supplier Management and the Guarantee of the Quality of Product [C], *DEStech Transactions on Environment, Energy and Earth Sciences epee*. ISSN: 2475‑8833.

RESEARCH EXPERIENCE

Bearing Early Anomaly Detection and Fault Diagnosis Based on Deep Learning   Sept 2019-Now

- Proposed Scaled-RFB method based on the RFB and designed Strip-CNN to achieve better fault diagnosis performance than benchmarks in noisy environments
- Next will consider the anomaly detection when anomalous samples are absent, and deal with the presence of periodic noise (signal components have fluctuations in period)

Intelligent Push of Automobile R&D Knowledge Based on Preference & User Group   Dec 2018-Jun 2019

- Modeled user preference on knowledge according to their behaviors and considered the decay of preference over time, then expressed the user preference as a vector space model
- Divided users into groups through clustering and community discovery algorithms, then realized personalized knowledge intelligent push based on a hybrid push algorithm

Batch Scheduling Optimization of Dynamic Flexible Workshop Based on Memetic Algorithm   Feb 2019-Jun 2019

- Built the mathematical programming model based on the dynamic batch strategy
- Solved the model through the memetic algorithm, which consists of the differential evolution algorithm (global) and the insert neighborhood search algorithm (local)

Temperature Control Scheme Design of Rice Storage Tank and Study on The Influence of Stacking Mode on Rice Storage at Low Temperature   Sept 2018-Jun 2019

- Applied experimental design and statistical methods to conduct experiments and obtain the temperature control scheme, then programmed it to an Excel macro
- Designed the storage container for experiments, explored the effects of stacking modes, locations, and other factors on the rice storage at low temperature

Lean Day Surgery Process Optimization and Its Management Information System (Prototype System) Development   Sept 2017-Mar 2019

- Optimized the treatment process of day surgery according to the lean thinking and its implementation status in Ruijin Hospital and Renji Hospital
- Designed and programmed three clients in the supporting management information system

Establishment of Evaluation Index of Medical Service Level in Internet Era   Mar 2018-Mar 2019

- Established the index for making choices between online and offline medical service
- Discussed the scope of online medical service at different stages of diseases

INTERNSHIP EXPERIENCE

Audit Intern at Financial Department of KPMG (Shanghai Office)   Jan 2018-Feb 2018

- Participated and efficiently completed 3 audit projects, and received recruitment invitation
- Completed the audit work with another colleague in 1 week based on self-taught excel skills, which required 3 employees and 2 weeks to complete in previous years

Process Intern at Hotel Service Department of Ctrip (Shanghai Headquarters)   Jul 2018-Sept 2018

- Made suggestions for the process of telephone customer service (such as optimizing the system interface layout) to improve their work efficiency in hotel reservations
- Optimized the process for customers to book hotels through Ctrip APP and calls
- Analyzed the impact of processes on order volume using statistical methods and Excel skills

CERTIFICATES & AWARDS

- IELTS 6.5   Feb 2021
- National Computer Skill Test (SQL server) Level 3   Nov 2018
- Two Software Copyrights   Sept 2020
- **Outstanding Graduate**   Jun 2019
- Suzhou Yucai Scholarship   Dec 2018
- Outstanding League Cadre   May 2018
- Toyota Textile Scholarship   Dec 2017
- **Merit Student**   Oct 2017
- First Prize of Society Practical Activities   Oct 2017
- Outstanding League Member   May 2017
- Second Prize of Excellent Scholarship   Dec 2016
- Second Prize of Zhixing Cup Society Practical Activities   Nov 2016

SKILLS

- Skilled in Matlab, Python
- Experienced in MySQL, Java, VBA

CAMPUS ACTIVITY

- Teaching Assistant   Feb 2020-Jun 2021
- Assistant Head Teacher   Sept 2019-Jun 2020
- Head of Dell Supply Chain Club (one of three)   Oct 2017-Sept 2018
- Marketing Director of Microsoft Student Club   Mar 2016-Jun 2017
- Deputy Director of Academic Center of Student Union   Sept 2015-May 2017
- Participated in 8 society practical activities and nearly 30 volunteering activities