

李 澄海

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教育

北京航空航天大学

北京

专业: 数学 (华罗庚实验班)

2017.09 - 2021.07(预期)

- 总GPA: 3.72/4.00
- 所修重点课程:
概率论, 数理统计, 实分析, 复分析, 数据结构, 大学计算机基础 (Python), 经济学原理, 数值分析, 抽象代数, 数理逻辑, 证券投资学概论, 信息检索与网络应用
- 奖学金: 北航优秀学生(校级-3%), 北航学习优秀奖学金(校级-5%), 致真书院优秀学生(院级-8%)
- 竞赛奖励: 全国大学生数学建模竞赛 (2019-北京市(省)级一等奖)

伦敦国王大学 (KCL)

伦敦

暑期学校

2019.07 - 2019.08

- 所修课程: Technology and Healthcare: **80/100** (一等)

科研经历

Stabilize Variational auto-encoder (VAE) in Natural language processing (NLP)

北京

应用于自然语言处理的稳定的变分自编码器

2019.09 -

科研组内实习, 导师为荣文戈 (副) 教授, 北京航空航天大学计算机学院
以及林成华博士 (高级讲师), 谢菲尔德大学计算机系

- 探究分析KL-散度在NLP任务中消失的原因
- 探索NLP中合适的特征解耦表示

Reduce the computation cost of Lattice Boltzmann Method (LBM) using neural network

北京

应用神经网络减少格点玻尔兹曼机的计算量

2019.07 - 2020.03(预期)

科研小组成员, 导师为王鹏教授 (青年千人), 北航数学学院
以及修东滨教授, 俄亥俄州立大学数学系 (俄亥俄州著名数学家)

- 使用 Tensorflow-GPU 实现 LBM 算法
- 使用 PCA, DNN, VAE 以及 XGBoost 等算法, 利用 LBM 的结果确定多孔材料中的有效扩散率

课外活动

Application of AI and big data in quantitative

在线

人工智能和大数据在量化交易中的应用 (Online workshop)

2019.09 - 2019.12

导师为Bowe Ma博士, 斯坦福大学计算与数学工程学院 (ICME)

- 建立了外汇 tick data 本地数据库 (使用 MongoDB), 并自动从在线 API 下载更新
- 编写了一个基本的量化交易系统 (使用深度学习模型 LSTM, Transformer等)

致真书院-院学生会 (传媒部成员)

北京

- 为书院活动制作海报及剪辑视频

2017.09 - 2018.06

FDT 冬季外汇公开赛 (demo account)

在线

- 获得478.42%收益率 名次: 1 / 1644

2017.01

技能与其他

- 计算机编程: Python, C/C++ (基础), NoSQL
- 机器学习: Tensorflow, Pytorch 等框架

Chenghai Li

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EDUCATION

Beihang University (BUAA)

Beijing

Bachelor in Mathematics (Hua Loo-Keng Experimental class)

Sep 2017 – Jun 2021 (expected)

- Cumulative GPA: **3.72/4.00**
- Selected Coursework:
Probability theory, Mathematical statistics, Real analysis, Data structure, University Computer Foundation (Python), Theory of Economics, Numerical analysis, Complex analysis, Information retrieval and Internet application
- Honors: Beihang University Outstanding students (3%), Beihang University Studying Outstanding Scholarships (5%), College Merit Student (8%), CUMCM (Contemporary Undergraduate Mathematical Contest in Modeling) - First Prize at the provincial level

King's College London

London

Summer School

Jul 2019 – Aug 2019

- Course: Technology and Healthcare: **80/100** (A)

RESEARCH EXPERIENCE

Stabilize Variational auto-encoder (VAE) in Natural language processing (NLP)

Beijing

*Internship in group, supervised by Professor Wenge Rong,
School of Computer Science and Engineering, Beihang University (BUAA) &
Dr Chenghua Lin, Department of Computer Science, University of Sheffield*

Sep 2019 –

- Analytically determine the reason of KL-Divergence vanishment
- Explore disentangled representation in NLP

Reduce the computation cost of Lattice Boltzmann Method (LBM) using neural network

Beijing

*Group member, supervised by Professor Peng Wang,
School of Mathematics and Systems Science, Beihang University (BUAA) &
Professor Dongbin Xiu, Ohio Eminent Scholar, Department of Mathematics, Ohio State University*

Jul 2019 – Mar 2020 (expected)

- Tensorflow implementation of LBM (GPU based)
- Tried PCA, DNN, VAE and XGBoost in determining D-effective of porous media

EXTRACURRICULAR ACTIVITIES

Application of AI and big data in quantitative

Online

Online workshop

Sep 2019 – Dec 2019

Supervised by Dr Bowei Ma, ICME, Stanford University

- Establish a database for tick data and automatically update from online API
- Build a basic trading system using python (Using deep-learning models: LSTM, Transformer etc.)

College Student union

Beijing

Member of Media Department

Sep 2017 – Jun 2018

- Making posters and Editing videos for college activations

FDT forex trading competition (demo account)

Online

- Achieve 478.42% profit (1st place/1644)

Jan 2017

TECHNICAL SKILLS & MISCELLANEOUS

- **Computer:** Python (including Tensorflow & Pytorch), C/C++(entry-level), NoSQL
- **Interests:** Forex trading, Machine Learning, Running