

Kunlun Zhu

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EDUCATION

School of Data and Computer Science, Sun Yat-sen University (SYSU) Aug 2015-July 2020

B.E in Computer Science, Overall GPA: 3.9/5.0 Major GPA: 4.02/5.0 (Top 15%)

Viterbi school of engineering, University of Southern California (USC) Spring 2021(paused)

Master in Artificial Intelligence

TOEFL: 100 (Reading: 24, Listening: 25, Speaking: 23, Writing: 28) GRE: (V:154, Q:170, AW:3.5)

RESEARCH EXPERIENCE

Large-Scale Pretraining Model research |Tsinghua University | Research assistant: March 2022-*Present*

Advisor: Xu Han & **Zhiyuan Liu**, Tsinghua Natural Language Processing Lab & BAAI

- Researched in Big Model parallelism for Knowledge Graph Embedding for the task of knowledge completion

Network Data Analysis of Shanghai Covid-19 lockdown |MIT | Online Project student: June 2022-*July 2022*

Advisor: Prof.Munther Dahleh, Massachusetts Institute of Technology, EECS

- Measured the lockdown policy effectiveness using Network modeling method such as ER network
- Offered a network decision making model for covid-19 prevention with network clustering and node centrality

Text to Speech for NLP |Xu Tan in MSRA| Remote Project student: July 2020-*Aug 2020*

Advisor: Xu Tan, Researcher in Microsoft Research Asia, Machine learning Group

- Trained and test a Text to Speech model with transformer method called **FastSpeech**
- Applied State-of-the-art Algorithm on text data to transform it into human speech on several datasets

Reinforcement Learning for NLP |Tsinghua University | Research Intern: Aug 2019-*Feb 2020*

Advisor: **Zhiyuan Liu**, Associate Professor in Tsinghua University, Tsinghua Natural Language Processing Lab

- Researched in Deep Reinforcement Learning methods for relation extraction problem
- Analyzed using Influence Function for wrong label problem of distant supervision in relation extraction

Transparency for Reinforcement Learning | CMU Robotics | Research Intern: July 2018-*July 2019*

Advisor: **Katia Sycara**, Professor in CMU Robotics Institute

- Proposed a new representation method for Deep Reinforcement Learning Algorithms; improved the original's ability in object saliency map for its interpretability in Atari Games
- Applied Influence Method to analyze its training data for the overall importance during the training process
- Used New Curiosity Method for object attention in the deep reinforcement learning for its transparency

Fake News Detection | UC Berkeley | Project Student

Dec 2017-Feb 2018

Advisor: **Mike Tamir**, lecturer in UC Berkeley

- Led a team to clean and analyze the data for English News in the internet, including 'Fake News'
- Our team achieved the highest score among all student teams for this project in terms of data collection

WORKING EXPERIENCE & INTERN ACTIVITIES

Shenzhen Blue Sea Great Vision Tech Ltd. | AI engineer:

Sept 2020-Feb 2022

- Built an AI recommendation system using deep reinforcement learning
- Build an IC Database and an information retrieval system

Machine Learning in Data Science | **Coco Krumme** | Online Teaching Assistant

Sept 2018-Dec 2018

- Served as a teaching assistant for the online course '**Machine Learning in Data Science**' for about 30 students, taught by researcher **Coco Krumme** from UC Berkeley

Intelligent Android platform for software testing | **Prof. Tao Xie** | Remote Project Intern

Feb 2018-May 2018

- Collected data for the **intelligent analysis** in Android software testing for **Prof. Tao Xie**, UIUC
- Applied some machine learning algorithms to classify different scenes in APP into different function types

Machine Learning in Quantity Finance | City University of Hongkong | Intern

July 2017-Aug 2017

- Applied Machine Learning Algorithms such as SVM, Adaboost in Quantity Research for better investment
- Applied parallel methods in Machine Learning Algorithms in super Computing Cloud Server, which ran 20 times faster than the original methods

SKILLS

- **Skills:** Python, Tensorflow, Pytorch, Linux, C++, Parallel programming
- Research Interests: Natural Language Processing, Deep Reinforcement Learning, Data Science

AWARDS

- 2016: **PAT** (national algorithm test); Rank first in the TOP and Advanced level (1/973); Scores: 100/100
- 2016&2017 Third-Class Prize in SYSU **ACM** Team-Selecting Algorithm Contest (twice)
- 2017&2018 The Outstanding Youth League member of the Academy, SYSU
- 2017: Rank 7th in the second round of **Big Data & Computing** Intelligence Contests out of 60 teams
- 2017: Second-Class Scholarship
- 2017: Recognition Award in **CCF CCSP**: Collegiate Computer Systems & Programming Contest
- 2018: Honorable Mention prize in the **MCM/ICM** competition
- 2019: Top 5 team in **Amazon** Alexa Hackathon workshop at Carnegie Mellon University
- 2015: Invited student of the Chinese selective exams of CMO (Chinese Mathematical Olympics)

朱昆仑

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教育背景

中山大学数据科学与计算机学院

Aug 2015-July 2020

计算机专业, 平均绩点: 3.9/5.0 专业 GPA: 4.02/5.0 (Top 15%)

托福: 100 (阅读: 24, 听力: 25, 口语: 23, 写作: 28) GRE: (语言:154, 数学:170, 写作:3.5)

研究经历

深度强化学习与自然语言处理 | 清华大学 | 研究实习生:

Aug 2019-Present

导师: 刘知远, 副教授, 清华大学自然语言处理实验室

- 探索与总结深度强化学习在自然语言处理中的相关应用
- 结合影响力函数方法对远程监督学习训练数据进行处理、分析

深度强化学习可解释性 | 卡耐基梅隆大学 | 研究实习生:

July 2018-July 2019

导师: Katia Sycara, 卡耐基梅隆大学机器人学院教授

- 使用可视化的“目标显著性视图”算法对多个雅塔丽游戏可解释性进行分析
- 使用影响力函数方法对深度强化学习训练数据进行可解释性分析

专业经历 & 项目

“机器学习和数据挖掘”课程教学助理

Sept 2018-Dec 2018

- 为 UC Berkeley 老师 Coco Krumme 开设的在线机器学习课程担任课程助教
- 帮助课程学生讲解机器学习和数据挖掘相关知识, 对学生项目进行评分

机器学习量化金融项目 | 香港城市大学 | 实习生

July 2017-Aug 2017

- 在量化投资模型中应用 SVM, Adaboost 等机器学习算法
- 在云服务器上使用大数据并行算法将运算效率提升 20 倍以上

技能

- 技能: Python, Tensorflow, Pytorch, Linux, C++
- 研究兴趣: 强化学习, 自然语言处理, 机器学习

奖励

- 2016: PAT (国家算法能力测试); 顶级与甲级第一 (1/973); 甲级分数: 100/100
- 2017&2018 优秀共青团员, 中山大学
- 2017: 中山大学二等奖奖学金
- 2019: 卡耐基梅隆大学亚马逊 Alex 骇客松竞赛前五名