Kai Wang

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EDUCATION

University of California, San Diego

La Jolla, CA

Master of Science in Electrical and Computer Engineering

Sept 2018 - Expected Mar. 2021

Northwestern Polytechnical University

Xi'an, China

Bachelor of Science in Aerospace Engineering

Sept 2014 - Jun 2018

• Awards: Outstanding students three times. National Entrepreneurship Award.

Programming Skills

- Languages: Python, Scala, Hive, SQL, Java, HTML, C++, Shell, Matlab
- Skills: Recommender System, SQL, Machine Learning, Deep Learning
- Tools: Git, TensorFlow, PyTorch, Spark, Hadoop, Docker, K8s, Django, Angular6, AWS, Linux/Unix, Vim

Professional Experience

ByteDance Beijing, China

Machine learning algorithm intern @ Watermelon Video

Sep. 2020 - Nov. 2020

• R&D in **recommender system** for short videos. **A/B test** in the subscription channel.

University of California, San Diego

La Jolla, CA

Summer Research Intern & Research Assistant, Advised by Prof. Pengtao Xie

Mar. 2020 - Aug. 2020

- Self-supervised learning for few-shot classification.
- **Detection** of COVID-19 cases using chest radiography images.
- Medical Video-Text based Question-Answering system, dialogue state tracking.

Tencent, Inc. Shenzhen, China

Application Research Intern @ IEG Content Recommendation Center

Oct 2019 - Feb 2020

- o Deployed 10+ recommender system pipelines (Related to Arena of Valor) using Spark, Redis, MySQL, Django, and K8s.
- Research in cutting-edge CTR prediction algorithm with one paper preprinted. Duty in algorithm implement and improvement based on Tencent game business scene.
- Built an internal tool related to tensor factorization and improved the algorithm based on product requirements. Raised online click rate by 20% with one patent finished.

Ping An Insurance (Group) Company of China, Ltd

Beijing, China

Algorithm Research Intern @ Medical and Healthcare Data Mining Group

Jun 2019 - Sep 2019

- o Participated in projects related to disease early prediction, diagnosis, medication recommendation and chronic disease control. Our algorithm research is used in PingAn Good Doctor (DAU 1M).
- Participated in KDD 2019 reinforcement learning track (ranked 11/255), disease control task. Implemented genetic algorithm combined with meta-learning, Q-learning, SARSA and DDPG.
- Participated in PhysioNet 2019 sepsis early prediction competition(time-series), using RNN and XGBoost.

Projects

The prediction for the adoption time of stray pets - Pytorch, OpenCV

- Used OpenCV to capture the face of stray pets and CNN to extract features. Implemented word2vec to extract the embedding from word description. Used XGBoost to process numerical features.
- Finally used NN, logistic regression and SVM to make classification, got 70% accuracy.

• Undergraduate Thesis: Flight Simulation and Scene Display —— OpenGL,C++

- Established three-dimensional model of the aircraft H-6 bomber using 3ds Max.
- Designed and implemented the flight scene. Completed simulation process using C++ and OpenGL.
- Improved the authenticity of flight simulation by OpenGL functions, realized data transmission by TCP/IP.