Yinan LIU

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Education

The College of William & Mary (Virginia, United States)   2020/09 –
Department of Computer Science
- Master in Computational Operations Research
- Courseworks: Compiler & Parallel Computing, Theory Computation, Network Systems and Design, Reliability, Accelerating Deep Learning, Linear Programming, Supply Chain Optimization

Peking University (Beijing, China)   2018/09 – 2020/07
Department of Software Engineering, School of Software and Microelectronics
- Bachelor in Software Engineering (Data Science Specialization)
- Courseworks: Software Engineering, Discrete Mathematics, Foundation of Data anlysis, Financial Data Analysis, Object Oriented Analysis and Design, Econometrics, Microeconomics, Information Security.

Northeastern University (Shenyang, China)   2013/09 – 2017/07
Department of Digital Media Technology, School of Software
- B.Eng in Media Technology
- Related coursework: C/C++, Data Structure, Computer Organization, OpenGL Programming, Operating System, Database Principle, Computer Graphics, Computer Networks, Artificial Intelligence, Virtual Reality, Human-Computer Interaction.

Research Projects

- Natural Language Processing (*submitted;* on arxiv: https://arxiv.org/abs/2012.01941):

We studied generalization of word-frequency models and algorithms (e.g., similarity search, entropy estimation, and power law) to point clouds produced by word-embedding models. My responsibility included the design and implementation of a high-dimensional KL-divergence estimator using a GPU-based library FAISS.

- Machine learning system for time-series neural network models (ongoing):

I studied machine learning systems for training neural net models (MLP and convolutional neural nets) for lead-lag time-series models. I developed a light-weighted scheduler to simultaneously train a large number of time-series models and designed an algorithm to remove data redundancies that arise from using MLP and CNN to fit time-series data. A course project report is available at https://bit.ly/3qsL3Ke.

Work Experience

Trends Media (Beijing, China)
Editor Intern of New Media Enterprise Department   2019/07 – 2019/09
I participated in the content production of the social media account of "Ya" magine
(http://journal.trends.com.cn). My primary responsibility was to *(i)* optimize presentation of magazine articles in social media platforms, with a goal to attract a specific group of audience, and *(ii)* maintain and monitor Ya's social network account.

Perfect World Co., Ltd (Beijing, China)
Product Manager Intern, Loong studio   2016/07 – 2017/04
Background: Perfect world is a 3A game producer in China whose games are distributed to more than 100 countries.

I participated in the production of an MMORPG mobile game "*power and glory*" (monthly cash revenue is approx. 2M USD after launch). Responsibilities include *(i)* independently "own" a process that manages the display name and ID of players' characters, and *(ii)* served as a community manager and reported players feedback (specifically related to design of tribes) to the engineering team.

Poverty Relieaf Program in Qian'an (Hebei, China)

Assistant of Chief Executive   2017/07 – 2018/07

I participated in the targeted poverty alleviation program and paid visits to households in Qian'an.
My responsibilities included production of records and statistics for the households that were below poverty thresholds for the government to analyze.

Betop Culture Technology (Shenyang, China)

Intern   2016/03 – 2016/07

Background: Betop is a company for building theme parks and rendering animations.
I participated in an animation production project. My responsibility included *(i)* production of model mapping, rendering of textiles for clothes, and polishing models for moving clothes, and *(ii)* production of cost-effective character rendering based on the storylines.

Honors & Awards

➢ Minister of literature and art, the 34th Student union of Northeast University
➢ Meritorious Winner, National Undergraduate Computer Design Competition