

YUWEI ZHANG

(919) 939-4132 | thuzhangyw@gmail.com | LinkedIn | Portfolio

EDUCATION

Duke University, Durham, NC	M.S. in Data Science	Aug. 2020 - May. 2022
National University of Singapore	Computer Science Master Candidate	Jan. 2020 - Jul. 2020
Tsinghua University, China	BEng in Environmental Engineering	Aug. 2011 - Jul. 2015

SKILLS

Programming: Java, Python, C++, Shell, HTML, CSS, SQL
Database: MySQL, PostgreSQL, Redis
Machine Learning: Scikit-learn, PyTorch, TensorFlow, NLP, AWS Certified Machine Learning Specialty
Techniques: Linux, Git, Docker, Flask, AWS, Spark, Slurm, OOP, REST API, Distributed Computing, Asynchronous I/O, Agile Development

WORK EXPERIENCE

Google LLC. <i>Software Engineer</i>	<i>Jul. 2022 - now</i> <i>Los Angeles, CA</i>
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Project: Movie Editor

- Developed a novel movie editor, enhancing overall user experience
- Orchestrated the process of content curation, integrating algorithms to autonomously select optimal content for customized movies.

Facebook Inc. <i>Software Engineer Intern</i>	<i>May. 2021 - Aug. 2021</i> <i>Menlo Park, CA</i>
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Project: Automated Machine Translation Toolkit

- Developed a multilingual **machine translation** toolkit compatible with various **Pytorch** models, with command-line tools for data pre-processing, training, evaluation
- Accelerated the speed of the entire pipeline by over 20 times via **asynchronous** processing
- Integrated **Hydra**, **OmegaConf** to support configuration inheritance, override and sweep with YAML
- Implemented a **snapshotting system** for consistency in long-term and large-scale distributed training
- Utilized **Slurm** to manage weeks-long training jobs in 300 languages and hundreds of TB data on **large-scale compute clusters**

DianRong Information Technology <i>Software and Algorithm Engineer</i>	<i>Jun. 2018 - Dec. 2018</i> <i>Chengdu, China</i>
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Project: Python and Flask based Tarot Divination App

- Developed a tarot divination app providing online predicting service with Flask, used SQLAlchemy to interact with MySQL database
- Innovated **social features** and **game currency mechanisms** to boost user engagement, gained 120,000 registered users and 2,500 daily unique visitors without any marketing expenses

Chengdu Think Tank 2861 Information Technology <i>Software and Algorithm Engineer</i>	<i>Jul. 2017 - Apr. 2018</i> <i>Chengdu, China</i>
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- To collect 60 million posts and comments from popular social media platform, developed a **distributed multi-threaded** crawler in Python, deployed on Alibaba-cloud and stored texts in PostgreSQL
- Constructed a dynamic **opinion analysis model** to evaluate County Government performance and achieved 90% positive rate in user feedback
- Established an official **social network** with 144,504 hierarchical connections, devised recommendation function by inferring potential connections