Yiyang Liu

3650 McClintock Ave, Los Angeles, CA 90089

+1 222-333-333 *|* [233@usc.edu](mailto:233@usc.edu) *|* [linkedin.com/in/yiyangiliu](https://linkedin.com/in/yiyangiliu) *|* [github.com/yiyangiliu](https://github.com/yiyangiliu)

# EDUCATION

**University of Southern California** Los Angeles, CA

*MS, Applied Data Science Aug. 2021 – May 2023*

**Beijing University of Technology** Beijing, China

*BE, Computer Science (with Hons.); GPA: 2.33/4, WAM: 23.3/100, Ranking: 23/233 Sep. 2016 – July 2020*

# PROFESSIONAL EXPERIENCE

**ByteDance** Beijing, China

*Software Engineer Intern Feb. 2021 – July 2021*

* **Action Center:** Automation will use user behavior to enter the behavior center in the database, and improve the efficiency of the recommended system.
* **User Event Storage:** Automatically parse events from the log, generate a stored database file, and deploy the service will behavior.The log generated by the user’s behavior on the client using streaming computing
* **A/B Test Toolkit:** Provided control tool for machine learning engineers to check different models’ end-to-end effect on the feed of our recommender system. Reduced 10% of average delivery time of deep-learning models.
* **DevOps:** Search and recommendation system services are stored in Ali Cloud, charges. Renovate the script, migrate the dictionary from Ali Cloud to its own distributed file system. Saved $3000 per month.

**FinTech Startup & Tsinghua University** Beijing, China

*Machine Learning Engineer Intern Nov. 2019 – June 2020*

* **Sentiment Analysis**: Use Tensorflow & Keras training multiple depth-learning models on multiple GPUs, tuning with pseudo-label, cross-verification and model fusion.
* **Paper Implementation (**[**GitHub**](https://github.com/yiyangiliu/BERT_Paper_Implementation)**):** Implemented the Bert with the paper. Contains all components, such as multi-head self attention mechanism, transformer, embedding layer. Code is open sourced.
* **Financial News Dataset:** Wrote web crawler to make 23.3G financial news corpus dataset with millions of records by using Requests, Beautifulsoup, Selenium. Used Pandas to clean data.
* **Kaggle Model Evaluation (**[**GitHub**](https://github.com/yiyangiliu/blog/blob/master/contents/kaggle-house-price-forecasting-competition-advanced.md)**):** Implemented best solution of kaggle house-prices forecasting competition and evaluated various machine learning methods’ metrics.
* **Bert4Keras (**[**GitHub**](https://github.com/bojone/bert4keras)**):** Bert4Keras is a prestigious open-source framework, which provides the state-of-the-art deep-learning language model like Bert. And integrate training, fine-tuning and other methods.

**Carnegie Mellon University** Pittsburgh, PA

*Research Assistant Sep. 2019 – Dec. 2019*

* **Cryptocurrency Transaction System (**[**GitHub**](https://github.com/yiyangiliu/A-simplified-Bitcoin-Transaction-System)**):** Mocked Bitcoin System to implenente all crucial components such as block mining, PoW (proof of work), wallet, key pairs, money transaction. Code is open sourced.
* **Technical Report:** Investigated Bitcoin system, and wrote out the whole operation process, including block mining, generation, proof, dissemination, transacting, etc.

**Ritatsu Software Tokyo** Tokyo, Japan

*Software Engineer Intern Aug. 2019 – Sep. 2019*

* **Quality Assurance:** Designed and wrote unittests, function tests, end-to-end tests to guarantee the robustness of code delivered to some prestigious financial institutions like Nomura Securities.

# SELECTED PROJECTS

**RescueTime-Visualization (**[**Demo**](https://github.com/yiyangiliu/RescueTime-Record)**,** [**GitHub**](https://github.com/yiyangiliu/RescueTime-Visualization)**):** Visualize RescueTime data and update it to GitHub to increase visibility. **Deep Learning Based Advertising System (**[**GitHub**](https://github.com/yiyangiliu/KeystoneProject)**):** Use DL model to identify objects in video to increase AD accuracy. **SELECTED SKILLS**

**Languages:** Golang, Python, Cpp, Shell

**Developer Tools:** Git, Docker, Cloud Platform, Jetbrains Suite