



Xiaoxiao Qi

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Professional Summary

Technical engineer in programmatic Ads optimization, machine learning, data engineering, statistical modeling, signal processing, computer vision and control theory. Holds a Ph.D. in Biomedical Engineering with a focus on Neuroimaging data resource development.

Education

-  [Illinois Institute of Technology](#) *Chicago, IL*, Dec, 2020
Ph.D. in Biomedical Engineering *GPA: 3.9/4.0*
-  [Huazhong University of Science and Technology](#) *Wuhan, China*, Jun, 2014
B.Eng in Biomedical Engineering *GPA: 3.7/4.0*

Experience

Sr. Data Scientist, Ads Optimization, [Epsilon](#), Remote, Chicago, IL Apr 2022-Present

- Designed and working a predictive system for ROAS optimization for programmatic campaigns.
- Designed, implemented and deployed a recommender system using machine learning for automatic campaign management.
- Managed two summer interns and worked on bid volume prediction using machine learning and time series modeling projects using clustering and gaussian process modeling.

Data Scientist, Ads Optimization, [Epsilon](#), Chicago, IL Jan 2021-Apr 2022

- Designed, built and deployed a bid budget allocation solution for campaign pacing optimization and reduced more than 3% cost for CTV campaigns and more than 10% cost for other types of inventories.
- Built and deployed a risk management model, improve the risk balance for multi-inventories, data centers by more than 40 % and applied the model for company-wide spending alert.
- Built and deployed an anomaly detection offline product using ML and DL for bid volume monitoring.
- Built and set up a Tableau dashboard for A/B testing monitoring. Conducted A/B testing for the new product.

Research

Development of data resources for [IIT Human Brain Atlas \(v.5.0\)](#)

- Developed probabilistic brain connectivity information data resource package using medical imaging and computer vision techniques.
- Data resources have had 8000+ downloads since release. Published the research results and resources to [journal paper](#).

Brain Tumor Imaging Auto-Segmentation with CNN

- Built and Implemented data preprocessing pipeline of 3D MRI data using patches, improved data processing efficiency by 30%.
- Built a 3D U-net model (CNN) using multi-class soft dice as the loss function, trained and evaluated the model on the large dataset of patches.
- Applied this model for tumor auto-segmentation with an overall accuracy of 0.89.

Skills

Proficient: Python, PostgreSQL, Linux, Machine Learning, TensorFlow, MLOps, Spark, PySpark, Optimization, Simulation, Statistical Modeling

Familiar: Docker, Hadoop, AWS, RNN, GAN, CNN, NLP, Control Theory

Basic: Scala, Java, Matlab, HTML/CSS, Flask, GNN, Transformer, LLM