Oliver Ren

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EDUCATION

Massachusetts Institute of Technology June 2019
- Masters of Engineering in Computer Science, Concentration in Natural Language Processing
- GPA: 5 / 5

Massachusetts Institute of Technology June 2018
- Bachelor of Science in Mathematics and in Computer Science
- GPA: 4.9 / 5

RESEARCH EXPERIENCE

MIT Spoken Language Systems Group **Cambridge, MA**
Graduate Research Assistant August 2018 – May 2019
- Developed a natural language model using transformers for determining which statements in a document are check-worthy, meaning they have a truth value that is verifiable and relevant.

MIT Laboratory for Computational Physiology **Cambridge, MA**
Undergraduate Researcher January 2017 – May 2018
- Applied logistic regression and recurrent neural network based models to time series data on emergency health records of ICU patients found in the MIMIC-III database to develop an early detection warning system for mechanical intubation.
- Used reinforcement learning on MIMIC-III data to learn optimal treatment policies for combating septic shock in ICU patients.

WORK EXPERIENCE

Klaviyo **Boston, MA**
Senior Data Scientist March 2022 – March 2023
- Updated the peer generation algorithm that powered benchmarks from a nearest neighbors approach to a clustering approach to increase scalability by reducing compute of both training and real-time generation.
- Built an automated pipeline for moving data from RDS database clusters to a HUDI datalake. Consolidated data from across the organization to increase data availability for analysis projects.
- Mentored a summer intern by speccing out her full stack summer project and providing guidance while she implemented and released a new set of benchmarks that was immediately available to all customers.

Data Scientist July 2019 – March 2022
- Designed, implemented, and maintained a full-stack benchmarks feature that allowed customers to better understand their performance via comparisons against a set of personalized peers.
- Automated monthly peer generation, eliminating manual processes needed to maintain the feature.
- Worked with product designers and product managers to reduce the visual clutter in the benchmarks UI in response to customer feedback that the original experience was overwhelming.
- Built out a system for running automated experiments comparing different recommendation algorithms. Used this system to iteratively improve and update our product recommendation algorithm.
- Analyzed the effectiveness of the automated review process that all new accounts are subject to. Increased the efficacy and efficiency of our support team by updating the underlying model, which reduced the number of accounts requiring manual reviews.

SKILLS

Programming: Proficient – Python, Git, Typescript, SQL