Washington, DC
http://onyilam.github.io

ONYI LAM

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EXPERIENCE

Senior Data Scientist	**Mission Lane**	**07/2020 - Present**

- Led the development of end-to-end machine learning products, from data gathering, to model training and tuning, to deploying to production and business impact evaluation

Research Scientist	**FiscalNote**	**06/2019 - 04/2020**

- Designed and built a natural language generator prototype system that provides news coverage on state legislation to monetize data as content. Built both frontend and backend components in Django. Deployed as internal service using Ansible.
- Influenced feature direction by applying NLP techniques on large text corpus (fine-tuning model in Pyorch on AWS SageMaker with GPU; topic modeling in R; exploratory data analysis with ElasticSearch and pandas; text classification with scikit-Learn, NLTK and spaCy).

Data Scientist	**Pew Research Center Data Labs**	**05/2017 - 05/2019**

- Led a team of 4 data scientists and engineers in applied machine learning projects. Technical contributions include implementing a transfer-learning model in Keras, building key parts of the production ETL pipeline with Python, exploratory data analysis and hypothesis testing in R.
- Project management responsibilities included setting weekly priorities to align team efforts and coordinating with external teams. Resulted in multiple highly cited publications and presentations in academic conferences.
- Expanded scope of answerable research questions by integrating external data sources with in-house survey; Conceptualized and developed a database that incorporate geographic attributes in survey design.

Fellow	**Data Science for Social Good**	**05/2016 - 08/2016**

- Contributed to an end-to-end machine learning data pipeline comprised of ETL, model training and validation, deployment and inference. Applied model to determine factors that elevate the risk of interacting with the criminal justice system among teens. Python/SQL/Command Line Tools.

PhD Graduate Student	**UC San Diego**	**08/2012 - 04/2017**

- Applied machine learning and NLP techniques to study firms' incentives to advertise on particular media outlets.
- TA for 11 undergraduate courses on microeconomics and econometrics.

Analyst	**BlackRock**	**07/2008 - 06/2010**

- Supported internal and external users of BlackRock's risk management software system (Aladdin); Maneuvered RDS to identify service issues using SQL and CLI tools.

EDUCATION

- UC San Diego: PhD in Economics, *05/2017*
- University of Tokyo: Master in Public Policy, (Japanese Government Scholarship, Fully Funded) *04/2012*
- UC Berkeley: BEng in Industrial Engineering and Operations Research, Cum Laude, Minor in Japanese *12/2007*

LANGUAGES AND SKILLS

- Programming: (Proficient) Python, R, SQL, Django, AWS, Git (Basic) Docker, Scala, Spark, ElasticSearch
- Data Science: Machine Learning, Causal Inference, NLP, Survey Methodology, Time Series Modeling
- Languages: English, Chinese, Japanese

PERSONAL PROJECTS

- Jicount: A platform that allows users to upload academic papers to seek constructive feedback and allow them to track publication progress. Built from scratch using Django. Deployed to AWS.