

Jessica G. Tiu

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EDUCATION

Duke University, Durham NC, Master of Science, Computer Science

Aug 2022 - May 2024

GPA: 4.0/4.0

University of the Philippines, Diliman, Bachelor of Science, Mathematics

June 2011 - June 2016

CWA: 1.25/1.0 (1-highest, 5-lowest scale); Magna cum laude

Oblation Scholarship (full university scholarship)

TECHNICAL SKILLS

Programming Languages: Python, SQL, TypeScript, HTML, Vue.js, MATLAB

Python Libraries: NumPy, Pandas, Matplotlib, Seaborn, PyTorch, Scikit-learn

Cloud Computing: Amazon Web Services, Google Cloud Platform (BigQuery, Cloud Storage, Compute Engine)

Others: Git, MongoDB, Confluence, Jira, SharePoint

PROFESSIONAL EXPERIENCE

Thinking Machines Data Science, Manila, Philippines

Natural Language Processing Team Lead

Apr 2020 - June 2022

- Managed a team of four in research and feasibility studies in the natural language processing, search, and information retrieval domains for Thinking Machines' document intelligence solution
<https://thinkingmachines.com/document-intelligence/>
- Mentored machine learning researchers in software engineering, experiment design, and project management

Machine Learning Researcher

Jan 2018 - June 2022

- Developed a search engine and knowledge management platform for a global intergovernmental organization to facilitate economic and trade research across 400 multi-page documents (**Elasticsearch**)
- Developed machine learning solutions for a top investment company in Singapore
 - Biotech insights platform that leverages natural language processing and deep learning (**BERT, PyTorch**) to track life science news developments
 - Industry classifier that uses natural language processing and multilabel classification to measure portfolio risk (**Scikit-learn**)
- Partnered with United Nations Development Programme to trace 3 years of budget plans and proposals across 20 agencies in the Philippine government
- Led a team in a strategic data assessment for one of the Philippines' largest real estate developers, creating real-time sales and marketing dashboards

Data Analyst

July 2016 - Dec 2017

- Taught sessions on deep learning and convolutional neural networks for the Philippine Department of Science and Technology's Deep Learning Workshop 2017
- Executed exploratory data analysis of business and residential customer segments for a national utility provider

PUBLICATION

Identifying chronic disease patients using predictive algorithms in pharmacy administrative claims: an application in rheumatoid arthritis

Journal of Medical Economics (JME) 2021