

Fangyuan (Carrie) Xu

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Education	Cornell University (New York), Master of Engineering (Computer Science) <ul style="list-style-type: none">• GPA: 4.06/4.3 (Overall), 4.1/4.3 (CS).• Relevant coursework: Natural Language Processing, Intro to Computer Vision, Deep Learning, Applied Machine Learning, Optimisation Methods, Networked and Distributed Systems.	Sep 2019 - May 2020
	University of Hong Kong (Hong Kong), Bachelor of Engineering <ul style="list-style-type: none">• Major in Computer Science and Minor in French.• GPA: 3.73/4.3 (Overall), 3.9/4.3 (CS). Graduated with First Class Honour.• Award: Kai Chong Tong Scholarship, Walter Brown Memorial Prizes in Mathematics, Ho Fook Prize.• Final Year Thesis on Mining HKUCS Graduate Student Data. Supervisor: Prof. Reynold C.K. Cheng.	Sep 2013 - June 2017
Skills	<ul style="list-style-type: none">• Python, Java, Scala, C++/C, SQL• PyTorch, TensorFlow, scikit-learn, Pandas, NumPy• Hugging Face, NLTK, OpenAI Gym, OpenCV, FFmpeg• KubeFlow, Apache Beam, Docker, AWS, GCP	
Experience	Twitter (San Francisco), Machine Learning Engineer <ul style="list-style-type: none">• Ads Machine Learning Team.• Drove offline for Ads prediction model, including feature engineering, experiment protocol and evaluation design, which improved Relative Cross Entropy by 5%.• Designed and developed ETL pipeline using Beam for batch feature generation.	July 2020 - Present
	CUHK T Stone Robotics Institute (Hong Kong), Research Assistant <ul style="list-style-type: none">• Deep learning on video understanding, supervised by Professor Yun-hui Liu.• Implemented self supervised learning with motion and appearance statistics [link].• Built a data processing pipeline on video datasets with OpenCV and FFmpeg.	June - Aug 2019
	Morgan Stanley (Hong Kong), Technology Associate <ul style="list-style-type: none">• Production management team for Electronic Trading platform (Asia).• Support lead for Asia inventory management system.• Built and deployed a set of tools for project provisioning, including REST API (<i>Flask</i>) and command line interface (CLI).	Dec 2017 - June 2019
Projects	<ul style="list-style-type: none">• <i>Grounded Language Understanding</i>: Developed a sequence to sequence model which maps situated sequential instruction to action on SCONE dataset (ALCHEMY).• <i>Name Entity Recognition on Twitter's dataset</i>: Built a NER model using BERT. Achieved F1 score with 0.71 (Placed top 2/60 on class leaderboard).• <i>Image Retrieval on Google Landmark Dataset</i>: Implemented and evaluated the DELG algorithm to perform image retrieval on Google LandMarks Dataset v2.• <i>Large Scale Image Engine</i>: Developed a Ridge Regression model for text to image retrieval using pre-trained image embeddings and Bag of Words.• <i>Landmark Recognition App</i>: Built a landmark recognition mobile app using React and Google Vision API (in collaboration with Priceline).	