# Xingxuan Li

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#### **EDUCATION**

### **Master of Computing in Artificial Intelligence**

Jan 2020 to Jun 2021

- School of Computing
- National University of Singapore, Singapore

### **Bachelor of Engineering in Artificial Intelligence, Honours**

May 2016 to Sep 2019

- Information Systems Technology and Design
- Singapore University of Technology and Design, Singapore

#### **PUBLICATION**

• Yang, J., Zhang, Y., Li, L., & Li, X. (2018). YEDDA: A Lightweight Collaborative Text Span Annotation Tool. Proceedings of ACL 2018, System Demonstrations. (Best Demo Paper Award Nomination)

#### **SCHOLARSHIPS & AWARDS**

#### NUS I&E Practicum @ SoC

Oct 2020

Awarded \$10,000 by School of Computing and NUS Enterprise

#### **SUTD Design and Engineering Scholarship**

May 2016 to Sep 2019

• SM2 full scholarship awarded to top 5% of the cohort

#### RESEARCH INTERESTS

• My personal philosophy and interest is to push the frontiers of AI to change current technology in ranges of industries, such as education, health care. My current interest lies in generative NLP, more specifically text summarization, and dialog system.

#### RESEARCH EXPERIENCE/PROJECTS

#### Project Officer, Webank-NTU Research Center

Feb 2021 to Present

- Lead a project on technical indicator digging from financial report in China market
- Implemented graph networks on supply chain and shareholder data to get embedding and trained a subsequent neural network to optimize ordinary technical indicators and increased RankIC by 20%

### Research Lead, AI Corrosion for Ship Inspection (Alpha Ori Technology)

Sep 2018 to Sep 2019

- Proposed a hybrid approach of using deep-learning models with image processing techniques for ship corrosion detection, by achieving image quality assurance (NIMA model), image segmentation (U-Net) and corrosion severity classification. The novel deep-learning approach of corrosion detection sparked the interest of the local maritime companies to AI evolution
- Designed and implemented a scalable system framework, consisting of an integrated web-based and light-weighted mobile
  application, facilitated by Amazon Web Services cloud storage and compute services, which enable the continuous training of
  the proposed deep-learning models

### Team Lead, Machine Learning NLP Competition

Sep 2018 to Dec 2018

- Built a Hidden Markov Model and Structured Perceptron in Python from scratch to perform Named-Entity Recognition in English, Chinese, and French to achieve its highest F1 score of 0.67 for French outperformed other peer groups
- Winner of the SUTD Machine Learning NER Competition for French

# Research Assistant, SUTDNLP Research Group (Professor Zhang Yue)

Mar 2018 to Jul 2018

- Researched and experimented in NLP annotation tools, participated in the development of YEDDA, the novel annotation tool and explored the recommendation system with Conditional Random Field algorithm.
- YEDDA attracted more than 600 stars in GitHub

### PROFESSIONAL EXPERIENCE

### Co-Founder & CTO, Everything Analytics

Jun 2020 to Present

- Lead a team of 6, applied machine learning approach to deliver accurate, unbiased and most suitable recommendations of Universities' post graduate programs which students should apply to base on their current academic background and personal preferences. Applied feature engineering and finetuned the model to achieve an overall accuracy above 70%
- On top of the core post graduate services, developed a similarity driven algorithm to connect users with peers and seniors to promote companionship and offer guidance in a p2p manner
- Researched and developed optimized database structure to utilize resource usage. Designed and lead the development of backend system in Python

### Risk and Quantitative Analyst, Gunvor Group Ltd

- Oct 2019 to Feb 2021
- Developed and backtested data-driven quantitative strategies on commodity trading using Python. With news sentiment data, developed attention neural network to generate trading signal and improved performance significantly
- Developed and automated in-house risk system using Python which reduced processing time significantly
- Created a program in Python that visualize time spreads and crack spreads historical market data, including open high low and trading volumes

#### Cyber Security Intern, KPMG Singapore

May 2018 to Aug 2018

- Implemented host security assessments for 200+ servers and appliances, using Microsoft Excel, by collaborating with clients and Center for Internet Security (CIS), exploiting and eliminating 2000+ vulnerabilities for various clients
- Developed a Python package, by using requests Python libraries to automate Nessus host assessment which is being used for 100+ hosts, reduced processing time by 500%

#### **Technology Intern, Deloitte Singapore**

May 2017 to Aug 2017

- Provided Identity Management, especially Key Management Service for banking client to manage security tokens
- Develop a Python tool independently for internal use, to transfer file formats among xml, json and txt
- Organized Deloitte Cyber Bootcamp 2017 of Asia Pacific region as logistic lead, coordinated 150 cyber professionals from 9 countries and prepared training materials for Identity Management Track

# TEACHING EXPERIENCE & CO-CURRICULAR ACTIVITIES

### Teaching Assistant, Modeling the System World (Linear Algebra)

Dec 2017 to Apr 2018

Prepared materials and helped tutor 500 of my peers to bolster their understanding of the basic math behind AI science.

#### Pianist & Event Facilitator, SUTD Chinese Culture Club

Oct 2016 to Sep 2019

- Executed a Chinese Language Learning Workshop via Taobao, Chinese for 30+ students and professors.
- Pianist for various important events, including SUTD Art Festival, SUTD Chinese New Year and so on.

### ADDITIONAL INFORMATION

- Fluent in English and Mandarin (spoken and written)
- Proficient in Python, Java and Mongo Database
- Familiar with TensorFlow, PyTorch and other Deep/Machine Learning libraries
- Experienced Pianist, performer for various college events, been a proud pianist for hometown city Orchestra since 2015.