Wentao Lu

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Université Bishop's (BU)	Sherbrooke, Québec, Canada, Expected Jun 2021
M.Sc, Computer Science, GPA 3.87/4	
Texas A&M University (TAMU)	College Station, Texas, USA, May 2014
M.Sc, Financial Econometrics, GPA 3.93/4	
Shanghai University of Finance and Economics (SHUFE)	Shanghai, China, Jun 2012
B.Ec, Mathematical Economics, GPA 3.26/4	
B.BA, Business Administration, Dual Degree	

Coursework	**Computer Science**: Data Mining, Parallel Models and Algorithms, Pattern Recognition, Image Analysis, Database Software Design, Concurrent and Real-Time Systems, Compilers and Interpreters, Automata Theory and Computational Complexity **Math, Statistics**: Mathematical Analysis (12 credit hours over 3 semesters), Linear Algebra, Probability Theory, Statistical Methods, Mathematical Statistics, Real Variable Function, Ordinary Differential Function, Stochastic Process **Economics**: Financial Economics, Financial Econometrics, Time Series Forecasting, Financial Decision Making Under Risk, Behavioral Finance, Economics Analysis of Financial Data, Intermediate Macroeconomics, Advanced Microeconomics

MOTIVATION	Education is an endless journey through knowledge and enlightenment, which in its real sense is the pursuit of truth. As a lifelong learner, I aspire to become an inquisitive, energetic computer science specialist and quantitative data analyst with a solid foundation in both technical skills and industry domain expertise.
EMPLOYMENT	▶ **Associate Software Engineer, Manulife-Sinochem Life Insurance** Shanghai, May 2016 ~ Sep 2019 • Troubleshooted, supported and maintained the bancassurance transaction processing system built on Oracle relational database and J2EE platform. • Interacted with users to document users' requirements and discuss technical feasibility by evaluating the impact of change on system architecture and functionality. • Created flowcharts, diagrams and high-level design documentation as necessary. • Designed, developed, unit tested and integrated new applications, features and transaction APIs as defined by the multichannel marketing team to support sales across different banks. • Collaborated with vendors and colleagues on the team to analyze and investigate application performance in order to mitigate technical uncertainty and risk. • Provided technical support for user testing as well as assisted in the development of automated test harnesses to ensure fast delivery of high quality code. ▶ **Financial Advisor, Sanko Soflan Holdings Japan** Tokyo, Jun 2015 ~ Feb 2016 • Conducted site visits regularly to newly released or undisclosed housing properties for data collection. • Exchanged daily market data with Japanese local real estate companies and small property agencies. • Provided investment planning advice for Chinese customers interested in real estate and land in Japan.
INTERNSHIP	▶ **Business Consultant Intern, Minami-Fuji Japan Consulting** Wuhan, Dec 2014 ~ Feb 2015 • Partnered with 5 students on a team in an intensive business consulting program that was funded by Japanese companies recruiting Chinese graduates and filmed by the China Phoenix TV. • Investigated, analyzed and conducted in-depth on-site research into the local senior housing market. • Created a 50-page consulting report and presented our marketing strategies to the hiring company. ▶ **HR Database Intern, SilverCourse Group** Shanghai, Jan 2012 ~ Apr 2012 • Assisted in head hunting data management including sorting, filtering and reviewing resumes. • Maintained and tracked job application status lists and updated records as necessary. ▶ **Forex Trader Intern, Shanghai Shimmer Investment Company** Shanghai, Oct 2011 ~ Dec 2011 • Participated in simulated forex trading using MetaTrader4 platform. • Prepared periodic market reports by analyzing trading signals, statistics and trends.

ONLINE SELF-STUDY	• Aced 200+ problems on leetcode.com and participated in 10 contests. • Completed 40+ Coursera courses in computer science with verified certificates. • Completed 2 Udacity nanodegree programs Data Scientist and AI Quantitative Investment.
HONORS & AWARDS	• Dean's List, Université Bishop's, 2021 • Chancellor's Excellence Scholarship, Université Bishop's, 2020 • Eric and Candace Innes Award, Université Bishop's, 2020 • Excellent Paper Award, National Students Economics Innovation Lab, Shanghai, 2011
RESEARCH PROJECTS	▶ **Sentiment Analysis Model, Udacity** • Built and deployed a deep learning model that predicts the sentiment of a user-provided movie review. • Created a simple web app that uses the deployed model and accepts user input. ▶ **Plagiarism Detector, Udacity** • Defined similarity metrics between two text documents and identify cases of plagiarism. • Performed feature engineering, trained and deployed a custom, plagiarism-classification model. ▶ **Instagram on Amazon Web Services, Udacity** • Developed a cloud-based application for uploading, listing, and filtering images using Node.js/Express. • Implemented a REST API to issue commands using HTTP, stored data in AWS with secure authentication signon features, and deployed to AWS Elastic Beanstalk. ▶ **Research Assistant (Remote), UC Berkeley Machine Learning Lab** Online, Sep ~ Nov 2017 • Assisted with data analysis for the kaggle competition Zillow's Prize. • Performed various data processing steps and experimented with feature engineering. • Prepared Jupyter notebooks for presentation during weekly online discussions.
LANGUAGES	• Intermediate proficiency in English. (IELTS 8/9, GRE 328/340) • Professional proficiency in Japanese. (JLPT N1 Level) • Native in Mandarin Chinese.
TECHNICAL SKILLS	▶ **Software Development** • Strong CS fundamentals in object-oriented design, algorithms, and data structures. • Proficient in SQL, PL/SQL and Oracle database, familiar with MongoDB Atlas. • Excellent programming skills of Python, Java, C/C++. ▶ **Machine Learning** • Experience with Apache Spark and Hadoop, familiar with cloud computing. • Experience with Caffe, Tensorflow, good understanding of supervised and reinforcement learning. • Good command of data analysis libraries NumPy, Pandas, scikit-learn, matplotlib. ▶ **Operating Systems, IDE, Software Toolbox** • Experience with CLion, PyCharm, IntelliJ IDEA, DataGrip and Mathematica. • Familiar with Linux OS, Unix Shell, Git/SVN version control, Markdown/LaTeX typesetting. • Basic knowledge of HTML, CSS, JavaScript and Raspberry Pi ARM architecture. ▶ **Finance, Business Analytics** • Certified SAS base & advanced programmer, prior experience with R/Matlab. • Comfortable working with Excel formulas and functions for data analysis. • Society of Actuaries (SOA) exams: Exam P, Exam FM.
PART-TIME	▶ Delivery Driver, Chef Cao's Restaurant Texas, Apr 2013 ~ May 2014 ▶ Waiter & Cashier, Taste of China Texas, Apr 2013 ~ May 2014
VOLUNTEER WORK	▶ Community Volunteer, TAMU "The Big Event" Texas, Mar 2013, Mar 2014 ▶ Teaching Assistant, Pre-College Summer Camp, SHUFE Shanghai, Jul 2012 ~ Aug 2012 ▶ High School Student Tutor, SHUFE Volunteer Club Shanghai, Sep 2010 ~ Jun 2011

Appendix - Online Certifications

Institution	Udacity Nanodegree Program Certificate
IBM Watson, Insight, kaggle WorldQuant	Data Scientist AI Quantitative Investment

Institution	Coursera Course Certificate
UC San Diego/HSE Stanford University	Algorithmic Toolbox Data Structures Divide and Conquer, Sorting and Searching, and Randomized Algorithms Graph Search, Shortest Paths, and Data Structures Greedy Algorithms, Minimum Spanning Trees, and Dynamic Programming
Stanford University University of Michigan University of Washington	Machine Learning Applied Machine Learning in Python Machine Learning Foundations: A Case Study Approach Machine Learning: Regression Machine Learning: Classification Machine Learning: Clustering & Retrieval
IBM	What is Data Science Open Source tools for Data Science Data Science Methodology Databases and SQL for Data Science
MongoDB Inc. University of Michigan	Introduction to MongoDB MongoDB Aggregation Framework Using Databases with Python Using Python to Access Web Data
Rice University	An Introduction to Interactive Programming in Python (Part 1) An Introduction to Interactive Programming in Python (Part 2) Principles of Computing (Part 1) Principles of Computing (Part 2) Python Programming Essentials Python Data Representations Python Data Analysis Python Data Visualization
Duke University	Statistics with R: Introduction to Probability and Data Statistics with R: Inferential Statistics Statistics with R: Linear Regression and Modeling
Atlassian Johns Hopkins University UCSD/McMaster University	Version Control with Git The Unix Workbench Learn Learning How to Learn: Powerful mental tools to help you master tough subjects