

# LIANG SHI

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11 WAVERLY PLACE, 9A • NEW YORK, NY United States 10003 • (347)803-0961 • ls4081@nyu.edu

## EDUCATION

**New York University** New York, NY 9/2015 - 5/2019

Bachelor of Arts in Mathematics, Economics, Minor in Computer Science GPA: 3.68/4.00

- Online Courses for Professional Development: Machine Learning Fundamentals, Programming with Python for Data Science, Natural Language Processing, Deep Learning with TensorFlow

## RELEVANT WORK EXPERIENCE

*Research Intern, UCLA Institute for Pure and Applied Mathematics* Los Angeles, CA 6/2018 - 8/2018

- Designed and implemented a 9-module web crawling and computational fact-checking framework
- Utilized natural language processing algorithms ("TF-IDF", "Word2Vec" and "Doc2Vec") to classify 168,000+ documents based on relevance to the search queries
- Scaled up analysts' ability to retrieve information by automating part of the manual search process

*Research Assistant(Prof. Kaan Ozbay), NYU Center for Data Science* New York, NY 9/2017 - 12/2017

- Performed data wrangling in Python on 14 vehicle sensor datasets for transportation safety analysis
- Performed data visualization with QGIS on 23,000+ geolocation data points
- Utilized unsupervised learning algorithms ("K-Means") to cluster bad road surfaces

*Data Analytics Intern, Shanghai Pharmaceuticals* Shanghai, China 5/2017 - 7/2017

- Analyzed clinical trial big data, performed data visualization in Python and Excel, and designed a questionnaire based on analytical findings for breast cancer self-diagnosis
- Improved the efficiency of SQL queries and reduced Hive database system operation time by 30%

## DATA SCIENCE & MATHEMATICAL MODELING PROJECTS

Using Data Analytics to Fight and Understand Cancer, **DataKind** 12/2018

Information Aggregation for Fitfinder - a Fitness Platform, **NYU Stern School of Business** 11/2018

Web Information Extraction and Computational Fact-checking, **UCLA IPAM**  
8/2018

Cluster Analysis for Walmart Trip Type Classification, **NYU Center for Data Science** 11/2017

Bad Road Surface Detection For Transportation Safety, **NYU Center for Data Science** 10/2017

Monte Carlo Model of Uber Dynamic Pricing System, **Harvard Summer REU** 8/2017

Shortest Path Model of Airbnb Cost Minimization Strategies, **Harvard Summer REU** 7/2017

## CONFERENCE PRESENTATIONS

"Information Extraction, Classification and Computational Fact-checking From Unstructured Web Data," supervised by Professor Dima Shlyakhtenko, presented at Joint Mathematics Meetings, Baltimore, MD, Jan 16, 2019

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## LEADERSHIP AND VOLUNTEER EXPERIENCE

*Volunteer, DataKind* 9/2018 - Present

- Developed a data analytics product for Manhattan Medical Research addressing public health issues

*Project Manager, UCLA Research in Industrial Projects for Students* 6/2018 - 8/2018

- Responsible for a project's design and implementation while keeping a team of 3 people focused on project deliverables
- Wrote a 90-page final report as the first author and presented the project to 200+ audience at UCLA

*Volunteer Math Coach, Let's Get Ready* 6/2016 - 8/2016

- Responsible for the academic and emotional development of 15 minority high school students
- Developed and delivered eight 2-hour class sessions on SAT Math followed by a 1-hour college application and essay workshop

## GRANTS AND AWARDS

**Dean's Undergraduate Research Fund**, New York University Fall 2018

- Received research fund for an independent study research project on "Natural Language Processing for Cancer Clinical Trial Notes Classification"

**Recognition Award for Project Manager**, Praedicat, Inc. Summer 2018

- Received recognition award for leading a research team to scale up the company's ability to deliver quality data for use in mathematical and microsimulation models

**Dean's Honors List**, New York University Spring 2018

- Placed on the Dean's Honors List for achieving an average of above 3.65 GPA over an academic year

**Dean's Undergraduate Research Fund**, New York University Fall 2017

- Received research fund for an independent study research project on "Cluster Analysis for Walmart Trip Type Classification"

## TECHNICAL SKILLS

**Languages:** Python, Java, R, SQL, noSQL, HTML/CSS, MATLAB

**Practical Skills:** Data Sourcing/Web Scraping, Data Visualization, Machine Learning, Natural Language Processing/Text Analysis, Web Programming and Design, Relational Database

## REFERENCES

Dima Shlyakhtenko, Ph.D

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Institute for Pure and Applied Mathematics

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Los Angeles, CA 90095

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