

# Junyuan Ke

## Curriculum Vitae

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### EDUCATION

**Emory University**, Atlanta, GA

May 2018

*Bachelor of Science in Computer Science*

*Bachelor of Art in Economics/Mathematics*

Omicron Delta Epsilon Honor Society | Dean's List

### RELEVANT COURSEWORK

Data Mining

Artificial Intelligence

Database Systems

Data Structures and Algorithms

Theory of Computing

Mathematical Economics

Computer Architecture

Discrete Structures

Statistical Methods

Probability and Statistics

Data and Decision Analytics

Financial Economics

Econometrics

Financial Accounting

Managerial Economics

### PUBLICATIONS

Working Paper (Second Author, Under Review):

**"PIVET: A Scaled Phenotype Evidence Generation Framework using Online Medical Literature"** (with J. Henderson, J. Ho and B. Wallace) *Journal of Medical Internet Research(JMIR)*, 2017.

### TECHNICAL SKILLS

*Languages:* Java, Python, C, SQL, Assembly, PHP, HTML, JavaScript, MATLAB, Verilog

*Analytic Tools:* Python, R, SQL, Tableau, Stata, MATLAB, Excel, WEKA, RapidMiner, SAS, Hadoop

*Tools:* ipynb, BeautifulSoup, MongoDB, selenium, Eclipse, Sublime, PyCharm, Linux, CSS, Anaconda, AJAX, JQuery

### WORK EXPERIENCE

**Department of Computer Science, Emory University**, Atlanta, GA

April 2017 – Present

*Undergraduate Research Assistant in Computer Science, Practical Data Exploration Lab*

- Conducted research under the supervision of Dr. Joyce Ho on the implementation of a phenotype validation tool for EHR data regarding text mining a medical journal database
- Worked on optimization of phenotype co-occurrence analysis of the framework to achieve a much better time efficiency
- Performed data analytic tasks on possibly clinical significant phenotypes to predict their clinical relevance
- Introduced golden-standard phenotypes into the system by adapting phenotypes from PheKB

**Department of Economics, Emory University**, Atlanta, GA

May 2017 – Present

*Undergraduate Research Assistant in Economics*

- Developed a web-scraper that collects company reviews from Glassdoor using selenium
- Studied the correlation between company stock returns and employee satisfaction in Wilshire 5000 companies and S&P 500 companies
- Performed data analytic tasks to study salary inequalities across states in the U.S.

**Department of ISOM, Emory Goizueta Business School**, Atlanta, GA

August 2017 – Present

*Undergraduate Research Assistant in Information Systems*

- Developed an email interface with randomized layout and advertisement placement using HTML, CSS and JavaScript
- Developed HIT tasks aiming at testing accuracy of email classification with the influence of advertisement placements using the platform of Amazon MTurk
- Studied whether advertisement placement would have a hidden cognitive and economic cost on web publishers

**Scholarly Inquiry and Research Program at Emory University**, Atlanta, GA

September 2016 – May 2017

*Undergraduate Research Partner*

- Participated in multiple data science/machine learning competitions
- Presented research results at Emory Undergraduate Research Symposium

- Sugon Information Industry**, Beijing, China May 2016 – August 2016  
*Intern, Cloud Storage Department*
- Installed and Maintained multiple cloud-storage server sites with PB-level data
  - Worked with VMware API for array integration for Network-Attached Storage

**COMPETITIONS**

- American Statistical Association DataFest** April 2017  
*Best Insight Award, 1<sup>st</sup> Place Emory Site*

- DrivenData Competition** November 2016  
 Top 3%, Predict Blood Donations

**PROGRAMMING PROJECTS**

- Glassdoor Scraper** August 2017
- Developed a web-scraper that collects company review, overview, and salary information for designated company and geolocations for Glassdoor.com
  - Performed data analysis on the data to study correlation between employee satisfaction and stock returns

- We-chat Crawler** May 2017
- Developed a tool that collects friend data from a social network app
  - Performed visualization tasks and generated word-cloud

- Business Analytics** January 2016 – April 2017
- Presented two case studies using descriptive statistics, ANOVA and regression functions

**LEADERSHIP AND COMMUNITY ENGAGEMENT**

- Emory Data Science Club** August 2016 – Present  
*VP Development*
- Gauged interest of upper-class students and hosted data science related workshops and events
  - Connecting sponsors for data science events and competitions held by EDSC
  - Hosted data science workshops and data science related networking events

- Sino-Emory Newsletter** May 2016 – Present  
*President & Editor-in-Chief*
- Managed the only bilingual student-run newspaper in Atlanta with more than 50 editors. Collaborated frequently with the Carter Center and the Confucius Institute
  - Served as a member of Media Council to develop and sustain quality student produced media at Emory

- Emory Media Council** May 2016 – May 2017  
*Representative*
- Represented Emory students by participating in passing policies regarding Emory Media

- Sigma Phi Epsilon Fraternity** August 2016 – Present  
*Website Chair and active brother*
- Maintained the official website of SigEp Emory

- Department of Russian and East Asian Languages** August 2015 – May 2016  
*Peer Mentor*
- Taught two sections of CHN 201 course on Chinese language

- Volunteer Emory** August 2014 – Present
- Active participant for Relay for Life, Alternative Volunteer trip and Day of Care

- Khan Academy** September 2015 – Present  
*Volunteer and Caption Translator*

**ADDITIONAL SKILLS AND INTERESTS**

**Knowledge:** Financial Accounting, Business Data Analysis, and Statistics

**Language:** Native in Mandarin Chinese; Bilingually Proficient in English

**Interests:** Cooking, running, also trained in Tae Kwon Do, Karate and Boxing