

# Yuchao Liu

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## EXPERIENCE

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- **Google Inc.** San Bruno CA  
*Data Scientist* *Jul 2021 - Present*
  - Works on Premium program of YouTube and YouTube Music
- **Amazon Inc.** Bellevue WA  
*Research Scientist* *Jul 2020 - Jul 2021*
  - Works on the science team supporting Amazon Flex - part of Last Mile group
  - Built a new driver ID fraud detection model from scratch with 70x accuracy boost and launched in EU, UK JP and US
- **Bing Ads Market Place Services, Microsoft Corporation** Bellevue WA  
*Data Scientist* *Apr 2018 - Jul 2020*
  - Works on display advertising team of Bing Ads
  - Design and implement machine learning algorithms, data illustration tools, and solves problems using math, statistics and machine learning
- **University of California San Diego** La Jolla, CA  
*Research and Teaching Assistant* *Sept 2013 - Mar 2018*
  - Teaching assistant for courses from freshman calculus to PhD level classes.
  - Research project spans from statistics theory to leaning algorithms.
- **Mitsubishi Electric Research Labs** Cambridge, MA  
*Research Scientist Intern* *Jun 2017 - Sept 2017*
- **BioMarin Pharmaceutical** Brisbane, CA  
*Biostatistics Intern* *Jun 2016 - Aug 2016*

## EDUCATION

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- **Department of Mathematics, University of California San Diego** La Jolla, CA  
*PhD, Mathematical Statistics; GPA: 3.98/4.00* *Sept. 2013 - Mar. 2018*
- **School of Management, Fudan University** Shanghai, China  
*Bachelor of Science / Master of Science in Statistics* *Aug. 2007 - July. 2013*

## ACADEMIC PUBLICATIONS

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- **Liu, Y.** and Arias-Castro, E. “A multiscale scan statistic for adaptive submatrix localization” ACM SIGKDD Conference on Knowledge Discovery and Data Mining, Anchorage AK, 2019.
- **Liu, Y.** and Guo J. “Distribution-Free, Size Adaptive Submatrix Detection with Acceleration” ALEA, Latin American journal of probability and mathematical statistics 17 (2020), 309-327.
- E. Laftchiev and **Liu, Y.** “Finding Multidimensional Patterns in Multidimensional Time Series” SIGKDD Workshop on Mining and Learning From Time Series, London UK, 2018.
- Arias-Castro, E. and **Liu, Y.** “Distribution-free Detection of a Submatrix” Journal of Multivariate Analysis 156 (2017): 29-38.

## SKILLS

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- **Programming Languages:** R, Python, SQL, SAS, MATLAB
- **Languages:** Chinese(native), English(fluent), Japanese(Basic)