

# Taisuke Yasuda

## Curriculum Vitae

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## Experience

### Akuna Capital

Chicago, IL

- Junior Quantitative Trader, August 2019 – Present

## Education

### Carnegie Mellon University

Pittsburgh, PA

- M.S. in Mathematical Sciences, August 2017 – May 2019
- Advisor: Ian Tice
- Thesis: *Asymptotic Stability of the Faraday Wave Problem*

### Carnegie Mellon University

Pittsburgh, PA

- B.S. in Mathematical Sciences, August 2015 – May 2019
- Additional Major in Computer Science
- GPA: 3.82/4.00

## Research Publications

- [1] Manuel Fernández V, David P. Woodruff, and Taisuke Yasuda. [The Query Complexity of Mastermind with  \$\ell\_p\$  Distances](#). In *Proceedings of the 22nd International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX)*, September 2019.
- [2] Manuel Fernández V, David P. Woodruff, and Taisuke Yasuda. [Tight Kernel Query Complexity of Kernel Ridge Regression and Kernel  \$k\$ -means Clustering](#). In *Proceedings of the 36th International Conference on Machine Learning (ICML)*, June 2019.

## Manuscripts

- [1] David Altizio, Ian Tice, Xinyu Wu, and Taisuke Yasuda. [The Nonlinear Stability Regime of the Viscous Faraday Wave Problem](#). In arXiv, abs/1905.04747, May 2019.

## Selected Coursework

**Computer Science (graduate level):** Coding Theory, Advanced Algorithms, Machine Learning on Large Datasets, Algorithms for Big Data, A Theorist's Toolkit

**Mathematics (graduate level):** Advanced Real Analysis, Probability with Martingales, Measure Theory, Discrete Mathematics, Classical Partial Differential Equations, Complex Analysis

## Teaching

Spring 2019	Algorithms (15-451)	TA
Spring 2019	Concepts of Mathematics (21-127)	TA
Fall 2018	Linear Algebra (21-241)	TA
Spring 2018	Principles of Real Analysis II (21-356)	grader
Fall 2016	Putnam Seminar (21-295)	grader

## Talks and Presentations

- Tight kernel query complexity of kernel ridge regression and kernel  $k$ -means clustering
  - ICML, June 2019
  - CMU Meeting of the Minds, May 2019
- How it's made: lower bounds for randomized algorithms
  - CMU Summer Math Seminar, July 2018

## Honors and Awards

Mar 2018	Top 207	Putnam Mathematical Competition
Mar 2017	Top 500	Putnam Mathematical Competition
Feb 2017		Undergraduate Research Fellowship in Computational Neuroscience
Feb 2016	Top 3	TartanHacks 2016
Feb 2016	Winner	All University Orchestra Concerto Competition
May 2015		Carnegie Scholarship
Mar 2015	2nd place	Pathfinder Scholarship in Mathematics

## Professional Service

- Conference subreviewer for SODA 2020