# 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 2019CMU 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	Тор 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 reviewer for SODA 2020