

# Eugene Han

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## EDUCATION

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**University of Illinois at Urbana-Champaign**, Urbana-Champaign, IL May 2021  
M.S. Statistics GPA: 3.83/4

**Carnegie Mellon University**, Pittsburgh, PA May 2019  
B.S. Mathematical Sciences with MCS College Honors GPA: 3.20/4  
Additional Major in Statistics, Minor in Computer Science

## HONORS & AWARDS

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Dean's List (High Honors) Spring 2019 (2018)  
Top 20% on the Putnam Mathematical Competition (score: 11, 13) Dec 2017, 2018  
Recipient of the Harris Award at HackCMU Sep 2015

## RESEARCH EXPERIENCE

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**University of Illinois, Department of Statistics** Mar 2020 - Present  
Advisor: Ruqing Zhu  
• Developed an algorithm to find the maximum likelihood estimation of the Fisher-Bingham distribution using gradient descent  
• Modeled microbiome data on the hypersphere for more practical inference

**Carnegie Mellon University, Department of Mathematical Sciences** Oct 2016 - Dec 2017  
Advisor: David Offner  
• Found the upper bound for a specific class of linear polychromatic colorings of the hypercube  
• Developed an algorithm to discover better lower bounds of previously known cases

## PUBLICATION

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E. Han and D. Offner, Linear  $d$ -polychromatic  $Q_{d-1}$ -colorings of the Hypercube, *Graphs and Combinatorics*, 34 (2018) 791-801.

## TEACHING EXPERIENCE

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**15-650 Algorithms and Advanced Data Structures**, Fall 2018 Fall 2018  
*Teaching Assistant*  
• Occasionally filled in for lectures on algorithm design and analysis when the professor was out  
• Held weekly office hours, graded homeworks and exams

**15-122: Principles of Imperative Computation**, Summer 2017 Summer 2017  
*Head Teaching Assistant*  
• Directed teaching assistants to ensure a smooth workflow  
• Led exam review sessions and performed the same tasks as listed below

*Teaching Assistant* Spring, Fall 2017  
• Led multiple weekly labs and recitations to teach C and basic data structures and algorithms

## PROFESSIONAL EXPERIENCE

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**Locus Analytics**, New York, NY

Jun 2018 - Aug 2018

*Data Analytics Intern*

- Developed classification models to assign job postings to the firm's proprietary classification system
- Analyzed economic complexity of geographically proximate communities
- Presented analytics work to technical and non-technical audiences

**Opticlose**, New York, NY

Sep 2014 - Aug 2015

*Data Analyst Intern*

- Analyzed sales data for the construction of regression models for predicting the success of sale closures
- Developed a R package to assist in future model developments
- Prepared slide decks detailing the analytical results for investors

## PROGRAMMING SKILLS

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R, Python, C, Java, Git