Jonathan J. Kampf

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Education

University of Pennsylvania, School of Engineering and Applied Science *Expected May 2022*
Candidate for Bachelor of Science in Engineering
Majors: Computer Science, Philosophy

Margolin Hebrew Academy Feinstone Yeshiva of the South *June 2017*
5.0/5.0
Honors/Activties
National Coca-Cola Scholar • Rhodes College Book Award •
Feinstone Scholar • President, National Council of Synagogue Youth •
Captain, Varsity Basketball

Experience

Data Structures and Algorithms, Teaching Assistant *January 2019-Present*
• Data Structures and Algorithms (CIS 121): Complexity, data structures, sorting algorithms, graph algorithms. Taught recitation and held office hours for students.

Mathematical Foundations of Computer Science, Teaching Assistant *May 2019 - December*
• Discrete math course focusing on proof techniques and problem-solving skills related to algorithm development taught at the University of Pennsylvania (CIS 160).
• Responsibilities include writing homework and solutions, leading recitation section, grading, and holding office hours.

Projects

Room Matching Machine *July 2019*
• As counselor for Achva West summer tour, noticed ineffiency in manually constructing hotel roommates given complex input of participant requests and disrequests.
• Designed, implemented, and deployed Java tool adapting Gale and Shapley's stable matching algorithm to successfully group 3+ participants into rooms randomly and based on participant preferences, allowing staff to focus attention on program and event logistics while helping participants cultivate friendships in twelve hotels across eight states (https://github.com/kampfj/Room-Matching-Machine).

Maps *April 2019*
Implemented Java's `Map` interface using both hashing by chaining and a trie data structure with the goal of testing the relative time and space complexities of the implementations and because implementing a HashMap is cool.

Leadership

Class Board, Vice President of Internal Affairs *April 2019 - Present*
Responsible for overseeing class-wide event planning and programming for our 2.500 student constituency. Coordinated with Penn administration to facilitate mindfulness events and student platforms for wellness throughout school year.

Coursework

Computer Science through Program Design • Mathematical Foundations of Computer Science • Data Structures and Algorithms • Principles of Physics: Mechanics and Wave Motion • Multivariable Calculus • Computer Architecture *Ongoing*

Skills

Java • OCaml • Python • HTML • CSS • Git • Adobe Creative Suite

Hobbies

Playing Ukulele • Reading • Coding • Meditation