Vahid Fazel-Rezai

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Education

Massachusetts Institute of Technology, Cambridge, MA — June 2018

Electrical Engineering and Computer Science, 5.0 GPA

18.440 / Probability	6.01 / Intro EECS	6.004 / Computation Structures
6.005 / Software Construction	6.006 / Intro Algorithms	6.008 / Intro Inference
6.036 / Intro Machine Learning	6.170 / Software Studio	6.858 / Computer Systems Security

Phillips Exeter Academy, Exeter, NH — June 2014

Linear Algebra · Electronics · Cryptography · Game Theory · Intro Real Analysis

Work

Nasdaq — *Software Development Intern* — 6/15—8/15

Design and build backend of new Flask web app prototype, perform customer interviews

Analyze historical stock prices to define and code real-time thresholds for dashboard alerts in web product

Somu Energy — *Director of Product Innovation* — 12/14—8/15

Research and design solar-powered central charging station for household battery packs in Nepal

Art of Problem Solving — *Grader* — 9/14—12/14

Grade and give written feedback for online programming and math problems

Leadership

MIT Market — *founder* — 2015

MSA Mentorship — *co-director* — 2015

Harvard-MIT Math Tournament — *webmaster* — 2014—2015

Research

Space Systems Lab, MIT — 9/14—12/14

Benchmark and improve vision software merging frames from 6 cameras on SPHERES satellites

Seung Kim Lab, Stanford — 3/14—6/14

Cross, dissect, and image new *Drosophila* stock lines with inserted gene for fluorescence

Program for Research In Mathematics, Engineering and Science, MIT — 2/13—9/13

Establish definitions and classify families of permutations for novel equivalence relations

Computational Biochemistry Lab, Univ. North Dakota — 10/11—3/12

Write C program to simulate peptide structure in varying conditions and compare results

Publications

Vahid Fazel-Rezai. Equivalence Classes of Permutations Modulo Replacements Between 123 and Two-Integer Patterns. *Electronic Journal of Combinatorics*, 21(2):#P47, 2014.

Presented at 2014 Mathematical Association of America Undergraduate Student Poster Session

Awards

MIT Web Programming Competition	4th Place & Most Responsive Design	2015
William Lowell Putnam Mathematical Competition	50th place, Honorable Mention	2014
Canadian Math Olympiad	7th place, Honorable Mention	2014
Asian Pacific Math Olympiad	Bronze Medal	2014
Intel Science Talent Search	Semifinalist	2014
Intel International Science and Engineering Fair	Fourth Award in Mathematics	2011
USA Junior Math Olympiad	6th place, Winner	2011

Languages

Python, C++, JavaScript, Node, Angular, HTML, CSS, SQL, MongoDB, Java, Git, MATLAB, LaTeX, French

Projects

http://vahid.io