

Vahid Fazel-Rezai
<http://vahidfazelrezai.me>

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| Education | Massachusetts Institute of Technology , Cambridge, MA Electrical Engineering and Computer Science, 5.0 GPA 6.01 / Intro EECS 18.03 / Differential Equations 18.440 / Probability 6.003 / Signals and Systems 6.004 / Computation Structures 6.005 / Software Construction 6.006 / Intro Algorithms 6.036 / Intro Machine Learning 6.170 / Software Studio Phillips Exeter Academy , Exeter, NH Linear Algebra Electronics Cryptography Game Theory Intro Real Analysis | June 2018 June 2014 |
| Work | Nasdaq – <i>Software Intern</i> Perform customer interviews for, design, and build out backend of new web app Define decision triggers, code data feed, and benchmark performance of new web dashboard Recharge Labs – <i>Product Innovation Specialist</i> Research and design charging station with potential for small-scale solar electricity in Nepal Art of Problem Solving – <i>Grader</i> Grade and give written feedback for online programming and math problems | 6/15–8/15 12/14–1/15 9/14–12/14 |
| Leadership | MSA Mentorship – <i>co-director</i> Harvard-MIT Math Tournament – <i>webmaster</i> Phillips Exeter Academy Science Bowl Team – <i>captain and co-founder</i> | 2015 2014–2015 2012–2014 |
| Research | Space Systems Lab , MIT Benchmark and improve vision software on SPHERES satellites that merges six frames into 3D cloud Seung Kim Lab , Stanford Cross, dissect, and image new <i>Drosophila</i> stock lines with inserted gene for fluorescence Program for Research In Mathematics, Engineering and Science , MIT Establish definitions and classify families of permutations for type of relation not previously studied Computational Biochemistry Lab , Univ. North Dakota Write C program to run simulation of peptide structure in varying conditions and analyze results | 9/14–12/14 3/14–6/14 2/13–9/13 10/11–3/12 |
| Publications | Vahid Fazel-Rezai. Equivalence Classes of Permutations Modulo Replacements Between 123 and Two-Integer Patterns. <i>Electronic Journal of Combinatorics</i> , 21(2):#P47, 2014. Presented at 2014 Mathematical Association of America Undergraduate Student Poster Session | |
| Awards | William Lowell Putnam Mathematical Competition 50th place, Honorable Mention MIT Web Programming Competition 4th Place & Most Responsive Design Asian Pacific Math Olympiad Bronze Medal Canadian Math Olympiad 7th place, Honorable Mention Intel Science Talent Search Semifinalist Intel International Science and Engineering Fair Fourth Award in Mathematics USA Junior Math Olympiad 6th place, Winner | 2015 2015 2014 2014 2014 2011 2011 |
| Languages | Python, C++, JavaScript, Node, Angular, HTML, CSS, SQL, MongoDB, Rails, Java, Git, MATLAB, French | |
| Projects | see http://vahidfazelrezai.me | |