# Vahid Fazel-Rezai

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| **Education** | **Massachusetts Institute of Technology**, Cambridge, MA | (expected) June 2018 |

Double Major: Computer Science and Engineering, Math                              Major GPA: 5.0/5.0

| 6.034 / Artificial Intelligence | 6.867 / Machine Learning | 6.172 / Performance Engineering |
|---|---|---|
| 6.046 / Analysis of Algorithms | 6.806 / Advanced NLP | 6.869 / Advances in Computer Vision |
| 6.170 / Software Studio (+TA) | 6.828 / Operating Systems | 6.875 / Cryptography & Cryptanalysis |

**Phillips Exeter Academy**, Exeter, NH                                                             June 2014

**Work**     **Google** — *Software Engineering Intern*                                                    5/16—8/15
Built web component in AdWords to display ad performance estimates in real-time
Decreased latency of backend services by migrating to improved tech stack

**Nasdaq** — *Software Engineering Intern*                                                    6/15—8/15
Designed and implemented an algorithm to trigger stock price alerts, validated by testing on historical data
Designed and built Python backend of prototype for file management and collaboration product

**Somu Energy** — *Director of Product Innovation*                                           12/14—1/15
Researched and designed solar-powered central charging station for household battery packs in Nepal

**Leadership**     **ProjX** — *Director*                                                               9/15—current
Leading committee of 15 members who fund, guide, and promote 70+ student projects per year
Member of TechX executive committee involved in high-level event planning

**MIT Undergraduate Research and Technology Conference** — *Paper and Poster Chair*     5/16—current
Managing paper submission, review process, presentation, and publication for IEEE conference

**MIT Sandbox Fund** — *student advisory board member*                                       1/16—current
Providing student perspective on running a $2 million fund to support student projects

**Research**     **Space Systems Lab**, MIT                                                        9/14—12/14
Benchmarked and improved vision software merging frames from 6 camera feeds on SPHERES satellites

**Program for Research In Mathematics, Engineering and Science**, MIT                      2/13—9/13
Established mathematical definitions and classified families of permutations for new equivalence relations

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

Kockel et al. A Drosophila LexA Enhancer-Trap Resource for Developmental Biology and Neuroendocrine Research. *G3: Genes, Genomes, Genetics*, Aug 2016.

**Awards**

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|---|---|---|
| MIT 6.170 Software Studio | Best Feature Set | 2015 |
| YHack | Datto 4K Challenge Winner | 2015 |
| MIT 6.148 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 (IMO alternate) | 2014 |
| Intel Science Talent Search | Semifinalist | 2014 |
| USA Junior Math Olympiad | 6th place, Winner (MOSP participant) | 2011 |

**Languages**     Python, Java, C++, JavaScript, Node, Dart, Angular, HTML, CSS, SQL, Mongo, MATLAB, Farsi, French