

# Matthew T. Murphy

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## Education and Skills

### Grinnell College:

- Computer Science BA, Total GPA: 3.72, Major GPA: 3.95 Expected May 2018

### Academic Honors:

- Dean's List (Fall 2014, Fall 2015, Spring 2016, Fall 2016)
- Grinnell College Trustee Honors Scholar Merit Scholarship
- HackMIT 2017 Machine Learning Community Prize -- Sponsored by Baidu
- HackMIT 2016 Best project under 4kb -- Sponsored by Datto

### Relevant Coursework:

- Bayesian Statistical Learning, Compilers, Operating Systems, Real Analysis, Probability, Computer Vision, Theory of Computation, Quantum Probability and Quantum Logic, Analysis of Algorithms, Statistical Modeling, Computer Organization and Architecture, Combinatorics and Graph Theory, Linear Algebra, Physics II (E&M)

### Programming Skills:

- C++, Python, Java, PHP, R, Haskell
- Github: [murphymatt](#)

## Experience

### Software Engineering Intern, Facebook - Menlo Park, CA.

May - August 2017

- Engineer on News Feed Machine Learning working on video chaining
- Build a database of new user-behavior features extracted from web front end (PHP and Python)
- Refresh and retrained ranking model with newly extracted features (C++ and Python)
- Online experiments yield 6% increase in video watch, 10+% increase in share

### Research Intern, MIT Lincoln Laboratory - Lexington, MA.

June - August 2015, June 2016 - August 2016

- Wrote machine learning algorithms to predict lethality of E. Coli strains based on degrees of genetic recoding, currently finalizing research paper with Dr. Peter Carr and Bea Yu
- Parallelized computationally expensive 3D biological modeling software on LLGRID super-computer system
- Organized and lead team of other intern engineers to begin development on wearable technology for short range encrypted data transfer with MIT funding
- Computationally modeled pairwise biological relations using transcription/translation models

### Grinnell College AppDev

October 2015 - December 2016

- Android Engineer for student-run mobile software development group at school
- Currently developing app for current food & events information for campus pub

## Additional Activities

### Grinnell College Men's Cross Country, Track & Field, Grinnell College – Grinnell, IA

August 2014 – Present

- Member of Midwest Conference Championship team and #11 ranked cross country team in the Midwest Region.

### Pan-Massachusetts Challenge Rider, Pan-Massachusetts Challenge – Wellesley, MA

August 2010 – Present

- Currently raised over \$6000 for cancer research at the Dana Farber Research Institute.