

# Farhan Damani

---

## Education

2017- **PhD, Computer Science**, *Princeton University*.

2012–2017 **BS, Computer Science**, *Johns Hopkins University*.  
Major GPA: 3.87/4.0

GRE: Quantitative 170/170 (97th percentile); Verbal 159/170 (82nd percentile);  
Writing 5.5/6 (98th percentile)

Relevant coursework: Probabilistic Graphical Models, Unsupervised Learning, Linear and Nonlinear Optimization, Probability and Statistics

## Research Experience

[Dr. Jonathan Pillow, Princeton Neuroscience Institute](#)

August 2017 - Probabilistic models of neural spike trains.

[Dr. Alexis Battle, Department of Computer Science at Johns Hopkins University](#)

January 2015 - August 2017 Developed a Bayesian hierarchical model to understand the impact of genetic variation on molecular traits.

[Prosthetics team at Applied Physics Lab, Laurel, MD](#)

June 2014- January 2015 Implemented an open source grasp planner to determine stable grasp points for the Modular Prosthetic Limb (MPL). Also worked on implementing a grasp quality metric using force sensors to compare the MPL to other low dexterity robotic manipulators.

## Presentations

2016 Damani F., et al. *Predicting tissue-specific effects of rare genetic variants*. Biological Data Science at Cold Spring Harbor Laboratory. 2016 (talk).

2016 Invited talk at Princeton University.

2016 Damani F., et al. *Exploring effects of rare non-coding variants*. Symposium on Advances in Genomics, Epidemiology, and Statistics. University of Pennsylvania Perelman School of Medicine. Philadelphia, PA. (poster).

## Publications

2016 [Damani F.](#), Kim Y., Li X., Tsang E., Davis J., Chiang C., Zappala Z., Strober B., Scott A., Hall I., GTE<sub>x</sub> Consortium, Montgomery S., Battle A. *A framework for predicting tissue-specific effects of rare genetic variants*. In preparation. Manuscript available here: <http://goo.gl/85qLFj>

- 2016 Li X., Kim Y., Tsang E., Davis J., Damani F., Chiang C., Zappala Z., Strober B., Scott A., Ganna A., Merker J., GTEx Consortium, Battle A., Montgomery S. *The impact of rare variation on gene expression across tissues*. *Nature*, 2017.
- 2016 Chiang C., Scott A., Davis J., Tsang E., Li X., Kim Y., Damani F., Ganel L., GTEx Consortium, Montgomery S., Battle A., Conrad D., Hall I. *The impact of structural variation on gene expression*. *Nature Genetics*, 2017.

---

## Awards

- 2017 National Science Foundation Graduate Research Fellowship Honorable Mention
- 2015 Joseph C. Pistrutto Fellowship recipient (Johns Hopkins Department of Computer Science research fellowship)
- 2016 Acheson J. Duncan Fund recipient (Johns Hopkins Department of Applied Mathematics and Statistics award to support research projects in statistics.)

---

## Media

- 2014 Johns Hopkins Engineering Magazine feature for work on prosthetics development and artificial intelligence as a summer intern and part-time employee in fall 2014 at the Applied Physics Lab. See <http://engineering.jhu.edu/magazine/2014/12/spured-get-better-grasp/#.VJm0o8AB0U> for details.
- 2014 One-on-one interview for work in prosthetics. Details here <https://rising.jhu.edu/spur>.

---

## Activites

- 2014-2015 Founder of the first intern think tank at the Applied Physics Lab. Led weekly meetings for 300+ interns to discuss engineering problems of interest and potential solutions.
- 2012-2014 Journalist for Ismaili USA Magazine, most widely distributed Muslim magazine in the country (over 500,000 subscribers).

---

## References

Dr. Alexis Battle; Department of Computer Science at Johns Hopkins University; [ajbattle@cs.jhu.edu](mailto:ajbattle@cs.jhu.edu)

Dr. Suchi Saria; Department of Computer Science at Johns Hopkins University; [ssaria@cs.jhu.edu](mailto:ssaria@cs.jhu.edu)

Dr. Benjamin Langmead; Department of Computer Science at Johns Hopkins University; [langmea@cs.jhu.edu](mailto:langmea@cs.jhu.edu)