ftownes@g.harvard.edu

http://willtownes.github.io/

SUMMARY

I am a Ph.D. student in Biostatistics at Harvard University focusing on Bayesian methods for large scale data. My advisor is Dr. Rafael Irizarry. My interests include machine learning, genomics, and infectious diseases. My goal is to produce statistical methods and open source software implementations to help scientists achieve their research goals more effectively.

EDUCATION

| Ph.D. Biostatistics | Harvard University | 2019^{1} |
|-------------------------------|-----------------------------|------------|
| A.M. Biostatistics | Harvard University | 2016 |
| M.S. Mathematics & Statistics | Georgetown University | 2013 |
| B.S. Biology, magna cum laude | Washington & Lee University | 2007 |

SKILLS

Python, R, SQL, Stan - highly proficient Linux/shell, LATEX, Git, Stata - proficient

PUBLICATIONS

Valeri, L., Patterson-Lomba, O., Gurmu, Y., Ablorh, A., Bobb, J., Townes, W., Harling, G. 2016. Predicting subnational Ebola virus disease epidemic dynamics from sociodemographic indicators. $PLOS\ One^2$

Townes, W. 2010. Seed dispersal of the genus *Leea* in forest patches of Bataan, Philippines. *Ecotropica*

IN PROGRESS

Townes, W., Hicks, S., Aryee, M., Irizarry, R. Factor Analysis with Dropout

EXPERIENCE

Teaching Assistant Harvard School of Public Health, Boston, MA 2016-present Various introductory/intermediate Biostatistics courses.

Test Engineer SRA International, Arlington, VA 2011-2014 Automated testing of web services for the Energy Star Qualified Products Exchange.

Software Analyst Perrin Quarles Associates, Charlottesville, VA 2008-2010 Supported development of the US Environmental Protection Agency's National Emissions Inventory System.

Fulbright Scholar Philippines

2007-2008

Conducted independent forest ecology research while living in an indigenous *Aeta* community in Bataan Province. Presented results to faculty and students at University of Philippines-Diliman. Traveled to Hong Kong, Singapore, Malaysia, and Thailand.

FUNDING

NIH T32 Training Grant Big Data to Knowledge

2016-present

Coordinator: Dr. John Quackenbush, Dana-Farber Cancer Institute.

NSF-CBMS Travel Award Topology, Geometry, and Statistics https://stat.utexas.edu/training/cbms-2016

2016

¹anticipated

 $^{^2}$ in press

NIH T32 Training Grant Clinical Epidemiology of Lung Diseases 2014-2016 Coordinator: Dr. Scott Weiss, Channing Network Medicine, Brigham and Women's Hospital.

LANGUAGES Spanish (intermediate), Brazilian Portuguese (basic), Tagalog/Filipino (rusty)