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http://willtownes.github.io/

### **SUMMARY**

I am a Ph.D. student in Biostatistics at Harvard University focusing on Bayesian methods for large scale "messy" 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	$2019^{1}$
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**

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

### **SUBMITTED**

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

## 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

2016

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**

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

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)

<sup>&</sup>lt;sup>1</sup>anticipated