Benjamin E. Noland

291 Moore Street
Princeton, NJ 08540
609-851-1137
benjaminnoland93@gmail.com
http://bnoland.github.io/

Education

Rutgers University, New Brunswick, NJ, September 2012-May 2016
BA in mathematics, minor in physics
School of Arts and Sciences Honors Program
GPA: 3.525

Selection of coursework:

- **Mathematics:** Calculus, linear algebra, ordinary differential equations, real analysis, complex variables, differential geometry, linear programming, abstract algebra, topology *(taken at Rutgers University)*
- **Physics:** Classical mechanics, electromagnetism, astrophysics *(taken at Rutgers University)*
- **Computer science:** Systems programming, data structures and algorithms *(taken at Princeton University while in high school)*
- **Statistics:** Advanced Placement statistics *(taken in high school)*

Skills

Computer skills:

- **Proficient with:** C, Python, Java, R, LaTeX, Windows, Unix, Git, Microsoft Office (and similar tools)
- **Experience with:** Stata, JavaScript (including JQuery), HTML, CSS, PHP, MySQL, x86 assembly language
- **GitHub account:** https://github.com/bnoland

Additional skills:

- **Probability theory** and **statistical inference** (hypothesis testing, point estimation, regression, etc.)
- **Data processing skills** (using software packages such as R and Stata)

- Willingness and ability to learn things independently
- Intent to expand my knowledge and skills in mathematics, statistics, and programming

Experience

Programming intern
Voorhees Transportation Center, Rutgers University, New Brunswick, NJ, June 2016-November 2016

- Designed and implemented R scripts to detect possible groups of riders in Citi Bike trip data. The latest versions of the scripts may be found at:

  `https://github.com/bnoland/citibike`

- Implemented a website for visualizing the results of this study. The latest version may be found at:

  `https://bnoland.github.io/citibike-map/`

Programming intern
Vertices, LLC, New Brunswick, NJ, May 2015-August 2015

- Worked on Mappler, an online geographic information system (GIS) tool. Designed and implemented a feature that allows users to upload images, extracts GPS data from the images, and adds them to the map database.
- Partially implemented a daemon for extracting images and associated GPS data from email accounts and adding them to a map database.

Programming intern
Voorhees Transportation Center, Rutgers University, New Brunswick, NJ, July 2014-August 2014

- Designed and implemented a website that maps crashes involving vehicles and pedestrians (including bicyclists) using data provided by the New Jersey Department of Transportation.
- The site allows the user to submit search queries to filter the data. The site can be found at:

  `http://pppolicy.rutgers.edu/vtcdata/pedestrian/pedmap.html`

Honors

- **2014 Rutgers Academic Excellence Award**, April 2014
- **Princeton High School Computer Science Award**, June 2012