# **Jacob Carey**

# **Biostatistician**

Columbia, MD - Email me on Indeed: indeed.com/r/Jacob-Carey/7bb90bf777df9d19

Professional and academic experience in statistics applied to many topics. Interested in a challenging new role working with data.

Authorized to work in the US for any employer

#### WORK EXPERIENCE

# **Biostatistician**

Telligen - Columbia, MD - March 2016 to Present

Develop hierarchical models to analyze medical data

Assess health care quality factors

Communicate results to clients using graphs

#### Researcher

Johns Hopkins School of Medicine - Baltimore, MD - May 2015 to Present

#### Responsibilities

- Develop software to perform statistical analysis of genomic data
- Perform copy number estimation and disease association analysis of genomic data using developed software

### Accomplishments

Publish software to Bioconductor (https://master.bioconductor.org/packages/release/bioc/html/CNPBayes.html)

## Skills Used

Distributed Computing, Statistical Computing, R, Linux, C++, Bayesian Statistics, Mixture Models, Hierarchical Models, Biostatistics, Markov Chain Monte Carlo

#### **Data Scientist**

Marriott International, Inc. - Bethesda, MD - January 2014 to September 2014

#### Responsibilities

- Assisted with new Marriott user-centric sort order algorithm
- Developed time series model to determine effectiveness of hotel promotions.
- Calculated weekly values of search engine keywords in order to best allocate online marketing funds.
- Performed web scraping of external websites to provide business insights.
- Worked with datasets greater than one billion rows.
- Automated reports using R & ggplot2 and ETL using Python scripts.

# Skills Used

SQL, R, SAS, Python, C++, Web Scraping, Data Visualization, Natural Language Processing, Sort Order Algorithms, Time Series Analysis

#### Consultant

Deloitte - Arlington, VA - June 2012 to January 2014

Responsibilities

- Managed a client-facing team of three consultants in the analysis of datasets greater than one million rows. Led regular meetings and presented results and data visualizations to key clients and internal stakeholders.
- Developed web application to be used by federal agencies to optimize resource allocation. Used Python to perform server-side calculations.
- Assisted federal agency in meeting requirements of government act using sample selection and estimation of disbursed grants and transactions.

#### Skills Used

SAS, Python, Microsoft Office Excel, SQL, Sampling, Data Visualization

#### **EDUCATION**

# Master's in Epidemiology

Johns Hopkins University - Baltimore, MD 2014 to 2016

#### **B.S.** in Mathematics

Virginia Tech 2008 to 2012

#### **SKILLS**

R (7 years), SAS (5 years), C++ (5 years), Python (4 years), Linear Models (3 years), Machine Learning (3 years), Bayesian Statistics (3 years), Linux (4 years), SQL (5 years), Time Series Analysis (2 years), JAGS (3 years), Tensorflow (1 year), Stan (2 years), Variational Inference (1 year), MCMC (3 years), Neural Networks (1 year), Bayesian Nonparametrics (2 years), Julia (1 year)

# **LINKS**

https://github.com/jacobcvt12