# Brendan Maione-Downing

42 Longwood Ave, #5, Brookline MA 02446 b.maionedowning@gmail.com // (978) 380-8650 github.com/bmd

## **EXPERIENCE**

## Current JUL 2016

#### Associate Software Architect, Blue State Digital

I work with executives, product stakeholders, and software engineers to design, build, and deliver complex, data-driven software on time and within budget, using a wide range of tools and technologies. I leverage my expertise in ReST API design and contract-driven development to engineer scalable, performant services using PHP and AWS. I've contributed to data warehousing, single sign-on, and API design projects for BSD's next-generation data products, as well as mentoring developers and leading internal trainings and workshops.

Recognition: BSD Internal Hackathon, Innovation Award winner (3x) and Overall Award winner (2x); BSD Employee Awesomeness Award (2015)

#### 2014-2016

#### Analytics Architect, BLUE STATE DIGITAL

I re-defined and expanded a multifaceted role that encompassed web analytics, data science, software engineering, and database management. As the advanced analytics practice lead, I architected fundraising and engagement projections for non-profit clients, using time series and neural network methodologies in R and Python. I designed, executed, and scaled Google Analytics and Omniture for enterprise and non-profit clients like Heifer International. I also provided data management and architecture recommendations for clients including Royal Caribbean and UNICEF. My most significant project was the Abacus data platform - an ETL and reporting tool that unified all legacy custom reporting solutions into a single system, delivering over 100 reports daily and 4B rows of data annually with a 99.99% fulfillment rate.

#### 2013-2014

#### Research Associate, PRIMA HEALTH ANALYTICS

I developed and supported statistical, financial, and geospatial models for clients in the renal dialysis industry using **R**, **Python**, and **ArcGIS**. My analysis was featured at industry conferences on behalf of clients including *Amgen* and the *National Renal Administrators Association*. I also served as lead developer on software that automated comparison of cost and outcome metrics to national and competitor averages, driving over \$100,000 in licensing revenue in its first year.

#### 2010-2013

#### Managing Editor, Digital Atlas of Roman and Medieval Civilizations

I managed project timelines, prioritized work, and supervised an international team of between 5 and 15 undergraduate and graduate contributors, serving as a main point of contact to faculty and university leadership. I also conducted exploratory analysis on a wide range of historical and geospatial data to produce results and figures for publication using Python, ArcGIS, and ArcPy.

# **TECHNOLOGIES**

Languages: Python (Flask, Django, Scipy), PHP (Laravel, Symfony, PHPUnit,

Doctrine), JavaScript (Jquery), R (Shiny)

Containerization: Docker, Amazon ECS Web Technologies: Apache, Nginx, AWS

Databases: MySQL, Postgres, Redshift, Vertica, Redis, Cassandra, DynamoDB,

SimpleDB

Project Management: JIRA, Smartsheets, Agile (Scrum)

Standards: Git, TDD, Contract-Driven Development, ReST, Swagger, RAML,

Object-Oriented Design

## **EDUCATION**

MAY 2013 B.A. in HISTORY, Harvard University, Cambridge, MA