Michael Dougherty

Software Engineer—Portland, OR michael.douglas.dougherty@gmail.com

Independent contractor providing efficient, correct software solutions to complex problems which minimize harm and maximize good.

EMPLOYMENT EXPERIENCE

Software Lead **PLANT Group** Portland, OR 2017 - present Wrote software for ESP8266 microcontrollers used to control smart irrigation systems and monitor soil conditions Python React Microcontrollers Built a client-facing web app to manage and report on said microcontrollers Portland, OR Senior Software CrowdStreet, Inc. Engineer Maintained and built features for a large existing Django web app 2016 - 2017 Did a greenfield rewrite of large swaths of the front end in React; built a custom data ReactJS Django table framework Docker Owned and maintained a multi-instance Docker-based devops setup Software Engineer Building Energy, Inc. Portland, OR 2014 - 2015 Implemented a management system which the city of San Francisco currently uses to manage its building energy benchmarking requirements. Python Django AngularJS Put BE "on the map" - made their app geospatially aware with a searchable map of Elasticsearch buildings and a custom geocoding service. Consultant Web Development Consultant Portland, OR 2010 - 2014 Doing literally everything, often as a one-man team. Front end, back end, devops, and some design. See below for details on recent clients. Python PHP HTML/CSS Research Assistant Pennsylvania State University State College, PA 2005 - 2009 Designed and coded simulations of crowd behavior in C++. C++ MATLAB Used data mining and neural networks to predict strength and reliability of materials based on microphotographic cross-sections Sole programmer on these and several other projects

EDUCATION

2007 - 2009	M.S. Computer Science	Penn State University
	Completed entire program except for thesis	

2002 - 2006 **B.S. Electrical Engineering** Penn State University

PAST CLIENTS

2017

Lead Developer

Python Elm

University of North Carolina

Chapen Hill, NC

Developed a web app for collecting data from a wide audience of participants [http://www.sensingsettlements.org]

2014

Lead Developer

SalterMitchell

Washington, D.C.

Developer
Python Flask Jade

Single-handedly developed a site for a genetics research startup which interfaces with a complex API. Worked tightly with a small team of in-house designers and developers as a remote contractor across the country.

2013

Lead Designer
Lead Developer
Python Django Sass

University of North Carolina

Chapel Hill, NC

Worked closely with a UNC research team to design and develop an open-source web application for visualizing and interacting with geospatial data. Designed a public-facing site to showcase this application. Also designed a highly customized website to showcase a professor's research projects.

[http://www.makingroomformanufacturing.org]

Developer PHP Laravel

PostgreSQL

partlyhuman / This Is Pop / NBC Universal

New York, NY

Worked with one other developer and a game design team to create a new online HTML5 game for NBC Universal's Character Arcade. Designed the entire backend to the game, working closely with the NBC team to connect their API to the game's frontend. Helped the NBC team white-label the game so as to produce other versions with different game assets and branding.

Developer
CoffeeScript
HTML5 Canvas

Grove Portland, OR

Collaborated with the Lead Developer to create a feature-rich HTML5 tool for iPhone case customization. Also did maintenance and implemented various new features on their highy-customized Django-powered eCommerce site.