# Justin L. Chavez

Email: juscha1@umbc.edu Github: https://github.com/JustinChavez Website: http://www.justin-chavez.com/

# **EDUCATION**

University of Pennsylvania,

Philadelphia, PA

Post-Baccalaureate Research Student, GPA: 4.0/4.0 (Graduate Level Coursework)

June 2017 - Dec 2017

**University of Maryland, Baltimore County (UMBC)** 

Baltimore, MD

BS, Computer Science, Minor in Biological Sciences, GPA: 3.6/4.0

Graduated May 2017

Relevant Coursework: Computer Vision, Machine Learning

# **SKILLS**

**Programming:** Python, MATLAB, C++, Java **Web Development:** Flask, Bootstrap, PostgreSQL **Other:** Amazon Web Services (EC2, RDS, EB), Linode Virtual Private Server (Ubuntu 16.04), D3.js

### RESEARCH / WORK EXPERIENCE

**University of Pennsylvania** – *Modeling decision making in uncertain environments* Computational Research Assistant in Gold Lab

Philadelphia, PA June 2017 – Dec 2017

- Maintained and contributed to 10+ year old MATLAB software for behavioral experiments with GitHub
- Collaborated on a Python application of model with a PostgreSQL backend and parallel computation
- Utilized Bayesian Adaptive Methods to approximate human threshold for movement detection

**Princeton Neuroscience Institute** – Categorizing video of fruit fly behavior Student Researcher

Princeton, NJ Aug 2016 – Jan 2017

- Applied probabilistic graphical models using TensorFlow (Python) to track data of fly behavior
- Processed PKL files from a Hidden Markov Model using MATLAB into interpretable graphs

**HackerPack LLC** – *Improving the beginner hackathon experience (http://hackerpack.io)* **Princeton, NJ** Co-Founder/Software Engineer Mar - Oct 2016

- Raised \$22,000 in seed funding from the Princeton University Keller Center
- Collaborated with co-founders to create Hackmates, a real-time web application built with Django and a serviced backend through Amazon Web Services' EC2 and RDS

Clarifai – Developer Evangelist training program

Remote

Technical Writer and Presenter

Aug - Dec 2016

- Taught an intro to Computer Vision Workshop at Hack Princeton Fall 2016 (http://bit.ly/hackptown)
- Developed an Amazon Alexa Skill tutorial (http://bit.ly/AlexaPythonTutorial)

#### **PROJECTS**

Alexa for Small Business – Exploring new use cases of Capital One's financial technology with Amazon Alexa First Place Award at Capital One Philadelphia DevExchange Hackathon

Oct 2017- Nov 2017

- Encapsulated Python backend into an Amazon Alexa Skill to expose customers to Capital One coupons
- Taught an Amazon Alexa tutorial based on our project at Hack Princeton Fall 2017 (http://bit.ly/cp1hack)

MajorWay - Data Visualization of college curriculum

Won Best Education Hack award at Hoya Hacks

Spring 2016

- Developed a Natural Language Processor in Python and trained with the DBpedia database
- Visually outlined the underlying disciplines of each college major with D3.js pie chart

# **AWARDS**

- (2017) Datmo Applied Al/Machine Learning Fellowship Probabilistic Modeling with Uber's Pyro
- (2015-16) Grace Hopper Celebrating of Women in Computing Travel Grants
- (2015) MIT Quantitative Methods Workshop Nominated by UMBC faculty to attend 1- week workshop taught by MIT professors on applying Python and MATLAB to large biological datasets
- (2015) MIT Media Lab Scholar to discuss emerging blockchain technology (e.g. Bitcoin) at Consensus
- (2013) Meyerhoff Scholarship Full Scholarship for UMBC