### **Brandon Harden**

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\*\*\* https://github.com/B-Harden/Portfolio \*\*\*

Education: Masters of Science in Data Science

Lipscomb University (LU)

January '17 - May '18

**Bachelor of Science in Economics** 

The University of Tennessee at Chattanooga (UTC)

August '10 - December '14

Experience: Developer Intern

HCA Healthcare (Nashville, TN)

August '18 - Present

- I report directly to the Director of IT&S Product Development Corporate Systems and accompany them during corporate meetings and interviews in order to gain experience at managing an IT team and IT projects.
- I assist HCA's ERP Development Team implement data analysis into both their products and reporting using technologies such as SSRS and Power BI.

Office Manager

January '17 - August '18

Direct Access Coordination (Brentwood, TN)

- Personal Assistant to company owner.
- I facilitated in the daily management of business records and office personnel.

Metro Council Intern

January '16 - December '16

Davidson County Metro Council – District 29 Councilwoman Karen Johnson (Nashville, TN)

- Personal Assistant to and mentored by District 29 Councilwoman Karen Johnson.
- Attended both Council and Committee meetings with Councilwoman Johnson.
- I assisted in various projects that aimed at advocating, engaging, and motivating local constituents into getting more involved with their community.

Data Manager January '15 - January '17

Care Management Consultants, Inc. (Brentwood, TN)

- Processed, organized and maintained data through physical and digital storage.
- · Involved in Life Care Planning through critiquing and consolidation of patient data needed for reporting.

#### Student Body Treasurer, Student Government Association (SGA)

August '13 - May '14

The University of Tennessee at Chattanooga (Chattanooga, TN)

- Managed approximately \$100,000.00 on behalf of Student Government Association.
- Managed ledger accounts, tracked expenses, and created budgets for Student Government Association.

#### Certificates:

- Google Cloud Platform Big Data and Machine Learning Fundamentals by Google Cloud on Coursera. Certificate earned at Thursday, May 17, 2018 7:37 PM GMT
- Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization by deepleaming.ai on Coursera. Certificate earned at Thursday, April 5, 2018 7:58 PM GMT
- Neural Networks and Deep Learning by deeplearning.ai on Coursera. Certificate earned on Tuesday, October 24, 2017 4:21
  PM GMT
- **Programming for Everybody (Getting Started with Python)** by University of Michigan on Coursera. Certificate earned on Tuesday, November 22, 2016 12:35 AM GMT

#### Projects (\*Please refer to GitHub):

- Neural Networks (Tensorflow)
  - O Using Tensorflow I created a neural network model that could predict hand written digits from the MNIST dataset.
- Reinforcement Learning (Open.ai Gym)
  - O Using Open.ai Gym I built a reinforcement learning model that could solve the classic cart-pole control problem.
- Machine Learning (Classification)
  - o Created and compared multiple classification prediction models in Scikit Learn that could predict, using medical data, which patients had diabetes and which did not. (Models: kNN, SVM, Decision Tree Classifier)
- Machine Learning (Regression)
  - Created and compared multiple regression prediction models in Scikit Learn that could predict the energy output from a Combined Cycle Power Plant (Models: Linear Regression, Ridge Regression, Lasso Regression, Polynomial Regression)
- Natural Language Processing
  - o Analyzed 2016 US Presidential campaign debate speeches for the amount of 'negative words' they contained and the effect this had on their polls throughout the campaign trail.
- Computer Vision
  - O Used OpenCV to perform multiple image transformations on digital input.
- Google Cloud Products (Recommendation System)
  - Using virtual machines within Google Cloud Products I created a recommendation system that suggested to potential travelers lodging accommodations based off previous searches and ratings/ reviews.

## Google Cloud Products (Forecasting)

Created machine learning models that could predict the demand for New York taxi cabs based off day-of-the-week and weather data, etc.

#### **Technical Skills:**

- Proficient in programming in SQL, R, and Python.
- Experienced in using Scikit Learn and Tensorflow.
- Proficient in creating and analyzing Machine Learning models.
- Proficient in using R Services in Microsoft Visual Studio.
- Experienced in using Microsoft Azure, Amazon Web Services (AWS) and Google Cloud Products (GCP).
- Experienced in creating Deep Neural Networks.
- Experienced in live broadcasting (video camera and network configuration), as well as hosting events.
- Competent in Bookkeeping and creating budgets.
- Great communication skills, team cooperation, time management, as well as possessing the ability to adapt quickly.
- Can speak basic conversational Japanese.

### Highlighted Coursework:

- Statistical Analysis and Decision Modeling
- Information Structures
- Big Data Management and Analysis
- Data Mining and Analysis
- Introduction to Econometrics
- Economic Development
- Game Theory

#### **Activities and Honors:**

- Research Presenter Lipscomb University Student Scholars Symposium, 2018
  - o Presented my personal research titled "A Review of Virtual Reality for the Training of Robotics Control Policies".
  - O My research reviews the application of using human demonstrations in VR to train control policies for physical robots.
- **Project Leader** Hands on Nashville Day, 2015, 2016, 2017, & 2018
  - Most recently in 2018 I led a group of over 100 volunteers with completing beautification projects at John F. Kennedy Middle School in collaboration with Hands of Nashville.
- **Best Lobbyist Award** Tennessee Intercollegiate State Legislature, 2013
  - o Received the 'Best Lobbyist Award' for my skill at lobbying legislation and pursuing committee members at TISL.
- Representative in the House of Representatives Tennessee Intercollegiate State Legislature, 2012
  - o Created my own Legislative Bill which I presented and passed through the House of Representatives.
- Director of Education Alpha Phi Alpha Fratemity Inc., August 2013- December 2014
  - o Collaborated with city organizations on organizing engaging events for fraternity and university students.
- Chairman Student Government Association District II College of Business, January 2013 May 2013
  - O Advocated for the College of Business students' desires and concerns within the department.
  - O Collaborated with the Dean of the College of Business in creating and hosting open forums for students.
- **Treasurer** National Pan-Hellenic Council, August 2012- May 2013
- Assistant Area Director Alpha Phi Alpha Fraternity Inc., August 2011- May 2012
  - ${\tt o} \quad \ \ \text{Created retreats and networking events for the fraternity's TN\,undergraduate chapters}.$