### **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

August '10 - December '14

**Bachelor of Science in Economics** 

The University of Tennessee at Chattanooga (UTC)

Process Improvement Engineer/ BA February '19 – May '20

HCA Healthcare (Nashville, TN)

• Certified Six Sigma Green Belt

- Automation Developer on Robotics Process Automation (RPA) Proof of Concept project.
  - Automated the workflow of granting Physicians application access needed to treat patients.
  - Became a certified RPA Developer during employment.
- Involved in process improvement projects such as Software Licensing Optimization and Lawson Data Security.
  - Licensing optimization efforts resulted in a pool of licensing keys worth over a million dollars in savings.
- My daily workflow involved working with numerous Business Units to create process maps of current state workflows and
  retrieving/ analyzing data with the identification of KPIs. I also assisted Business Units implement future state process and control
  plans.

Developer Intern August '18 – February '19

HCA Healthcare (Nashville, TN)

- I reported directly to the Director of IT&S Product Development Corporate Systems and received mentorship in IT Management.
- I assisted HCA's ERP Development Team implement data analysis into both their products and reporting using technologies such as SQL Server, SSRS, Power BI, Python and R.

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 - April '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:

**Experience:** 

- RPA Developer Advanced by UiPath- 643183669487356432. Certificate earned on Sunday, December 12, 2019
- Six Sigma Green Belt by HCA Healthcare & Belmont Univ. Jack Massey Grad. School of Business-#0403. Certificate earned on October 17th, 2019
- 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 deeplearning.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):

- Robotic Process Automation (RPA) Proof-of-Concept
  - o Trained and certified as a RPA Developer.
  - O Automated the workflow of granting employees application access via eSAF requests.
  - O Developed automation went into production.
- Lawson Security Access
  - O Analyzed Lawson Security Team's data to discover variances in user and table data access.
  - o Developed and proposed more efficient method of granting/eliminating access and security management.

o Proposal accepted by Lawson Security Team.

### • 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)

 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

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

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:**

- Certified UiPath Robotics Process Automation (RPA) Engineer
- Certified Lean Six Sigma Green Belt
- Proficient in programming in Python, R, and SQL.
- Experienced in using Scikit Learn and Tensorflow.
- Proficient in creating and analyzing Machine Learning models.
- Capable of developing Full Stack Apps using Python, Flask/ Django, and JavaScript.
- 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 understand and speak a little 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
  - 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
  - Received the 'Best Lobbyist Award' for my skill at lobbying legislation and persuading 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 Fraternity 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
  - 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
  - Created retreats and networking events for the fraternity's TN undergraduate chapters.