

Brandon Harden

bharden@mail.lipscomb.edu

*** <https://github.com/B-Harden/Portfolio> ***

Education:	Masters of Science in Data Science <i>Lipscomb University (LU)</i>	January '17 - May '18
	Bachelor of Science in Economics <i>The University of Tennessee at Chattanooga (UTC)</i>	August '10 - December '14
Experience:	Process Improvement Engineer <i>HCA Healthcare (Nashville, TN)</i>	February '19 - Present
	<ul style="list-style-type: none">• Certified Six Sigma Green Belt• Automation Developer on Robotics Process Automation (RPA) Proof of Concept project.• Involved in process improvement projects such as Software Licensing Optimization and Lawson Data Security.	
	Developer Intern <i>HCA Healthcare (Nashville, TN)</i>	August '18 – February '19
	<ul style="list-style-type: none">• 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 <i>Direct Access Coordination (Brentwood, TN)</i>	January '17 – August '18
	<ul style="list-style-type: none">• Personal Assistant to company owner.• I facilitated in the daily management of business records and office personnel.	
	Metro Council Intern <i>Davidson County Metro Council – District 29 Councilwoman Karen Johnson (Nashville, TN)</i>	January '16 – December '16
	<ul style="list-style-type: none">• 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 <i>Care Management Consultants, Inc. (Brentwood, TN)</i>	January '15 - January '17
	<ul style="list-style-type: none">• 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) <i>The University of Tennessee at Chattanooga (Chattanooga, TN)</i>	August '13 - May '14
	<ul style="list-style-type: none">• Managed approximately \$100,000.00 on behalf of Student Government Association.• Managed ledger accounts, tracked expenses, and created budgets for Student Government Association.	

Certificates:

- **RPA Developer Advanced** by UiPath- 643183669487356432. Certificate earned at Sunday, December 12, 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):

- **Neural Networks (Tensorflow)**
 - Using Tensorflow I created a *neural network* model that could predict hand written digits from the MNIST dataset.
- **Reinforcement Learning (Open.ai Gym)**
 - 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.
- 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".
 - 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 pursuing committee members at TISL.
- **Representative in the House of Representatives** - Tennessee Intercollegiate State Legislature, 2012
 - 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
 - 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.
 - 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.