

# Brandon Harden

bharden@mail.lipscomb.edu

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

Education:	<b>Masters of Science in Data Science</b> <i>Lipscomb University (LU)</i>	January '17 - May '18
	<b>Bachelor of Science in Economics</b> <i>The University of Tennessee at Chattanooga (UTC)</i>	August '10 - December '14
Experience:	<b>Process Improvement Engineer</b> <i>HCA Healthcare (Nashville, TN)</i>	February '19 - Present
	<ul style="list-style-type: none"><li>• Certified Lean Six Sigma Green Belt</li><li>• Automation Developer on Robotics Process Automation (RPA) Proof of Concept project.</li><li>• Involved in process improvement projects such as Software Licensing Optimization and Lawson Data Security.</li></ul>	
	<b>Developer Intern</b> <i>HCA Healthcare (Nashville, TN)</i>	August '18 – February '19
	<ul style="list-style-type: none"><li>• I report directly to the Director of IT&amp;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.</li><li>• I assist HCA's ERP Development Team implement data analysis into both their products and reporting using technologies such as SSRS and Power BI.</li></ul>	
	<b>Office Manager</b> <i>Direct Access Coordination (Brentwood, TN)</i>	January '17 – August '18
	<ul style="list-style-type: none"><li>• Personal Assistant to company owner.</li><li>• I facilitated in the daily management of business records and office personnel.</li></ul>	
	<b>Metro Council Intern</b> <i>Davidson County Metro Council – District 29 Councilwoman Karen Johnson (Nashville, TN)</i>	January '16 – December '16
	<ul style="list-style-type: none"><li>• Personal Assistant to and mentored by District 29 Councilwoman Karen Johnson.</li><li>• Attended both Council and Committee meetings with Councilwoman Johnson.</li><li>• I assisted in various projects that aimed at advocating, engaging, and motivating local constituents into getting more involved with their community.</li></ul>	
	<b>Data Manager</b> <i>Care Management Consultants, Inc. (Brentwood, TN)</i>	January '15 - January '17
	<ul style="list-style-type: none"><li>• Processed, organized and maintained data through physical and digital storage.</li><li>• Involved in Life Care Planning through critiquing and consolidation of patient data needed for reporting.</li></ul>	
	<b>Student Body Treasurer, Student Government Association (SGA)</b> <i>The University of Tennessee at Chattanooga (Chattanooga, TN)</i>	August '13 - May '14
	<ul style="list-style-type: none"><li>• Managed approximately \$100,000.00 on behalf of Student Government Association.</li><li>• Managed ledger accounts, tracked expenses, and created budgets for Student Government Association.</li></ul>	

## 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.