

# Brandon Harden

bharden@mail.lipscomb.edu

(615)925-9090

\*\*\* <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>Corporate Intern</b> <i>Healthcare Corporation of America - HCA (Franklin, TN)</i>	September '18 - Present
	<ul style="list-style-type: none"><li>I report directly to the Director of IT&amp;S Product Development Corporate Systems. I accompany the Director during corporate meetings and interviews in order to gain experience at managing an IT team and IT projects.</li><li>I assist HCA's Enterprise Resource Planning (ERP) Development Team implement data analysis into both their products and reporting.</li></ul>	
	<b>Office Manager</b> <i>Direct Access Coordination (Brentwood, TN)</i>	February '17 – September '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>City Council Intern</b> <i>Nashville City Council – District 29 Councilwoman Karen Johnson (Nashville, TN)</i>	January '16 – December '16
	<ul style="list-style-type: none"><li>Personal assistant to District 29 Councilwoman Karen Johnson.</li><li>I assisted in various projects that aimed at advocating, engaging, and motivating local constituents in getting more involved with their community.</li></ul>	
	<b>Data Manager</b> <i>Care Management Consultants, Inc. (Brentwood, TN)</i>	March '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>Treasurer, Student Government Association (SGA)</b> <i>The University of Tennessee at Chattanooga (Chattanooga, TN)</i>	August '13 - May '14
Certificates:	<ul style="list-style-type: none"><li><b>Google Cloud Platform Big Data and Machine Learning Fundamentals</b> by Google Cloud on Coursera. Certificate earned at Thursday, May 17, 2018 7:37 PM GMT</li><li><b>Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization</b> by deeplearning.ai on Coursera. Certificate earned at Thursday, April 5, 2018 7:58 PM GMT</li><li><b>Neural Networks and Deep Learning</b> by deeplearning.ai on Coursera. Certificate earned on Tuesday, October 24, 2017 4:21 PM GMT</li><li><b>Programming for Everybody (Getting Started with Python)</b> by University of Michigan on Coursera. Certificate earned on Tuesday, November 22, 2016 12:35 AM GMT</li></ul>	
Projects (*Please refer to GitHub):	<ul style="list-style-type: none"><li><b>Neural Networks (Tensorflow)</b><ul style="list-style-type: none"><li>Using Tensorflow I created a <i>neural network</i> model that could predict hand written digits from the MNIST dataset.</li></ul></li><li><b>Reinforcement Learning (Open.ai Gym)</b><ul style="list-style-type: none"><li>Using Open.ai Gym I built a <i>reinforcement learning</i> model that could solve the classic cart-pole control problem.</li></ul></li><li><b>Machine Learning (Classification)</b><ul style="list-style-type: none"><li>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)</li></ul></li><li><b>Machine Learning (Regression)</b><ul style="list-style-type: none"><li>Created and compared multiple regression prediction models in Scikit Learn that could predict the <i>energy output</i> from a <i>Combined Cycle Power Plant</i> (Models: Linear Regression, Ridge Regression, Lasso Regression, Polynomial Regression)</li></ul></li><li><b>Natural Language Processing</b><ul style="list-style-type: none"><li>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.</li></ul></li><li><b>Computer Vision</b><ul style="list-style-type: none"><li>Used OpenCV to perform multiple image transformations on digital input.</li></ul></li><li><b>Google Cloud Products (Recommendation System)</b><ul style="list-style-type: none"><li>Using virtual machines within Google Cloud Products I created a <i>recommendation system</i> that suggested to potential travelers lodging accommodations based off previous searches and ratings/ reviews.</li></ul></li><li><b>Google Cloud Products (Forecasting)</b><ul style="list-style-type: none"><li>Created machine learning models that could predict the demand for New York taxi cabs based off day-of-the-week and weather data, etc.</li></ul></li></ul>	

### 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
  - 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.