

# Christopher M. Sharkey

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**Local Address:** 306 Beaver Hall, State College, PA 16802

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<b>Education</b>	<b>The Pennsylvania State University</b> , State College, PA Bachelor of Science in Toxicology, GPA: 3.58   Concentrations: Information Science Technology	August 2013 – May 2017 (Expected)
<b>Experience</b>	<b>Information Technology Intern</b> <i>Humana, Enterprise Architecture   Louisville, KY</i> <ul style="list-style-type: none"><li>• Explored potential of data virtualization in data transformation process</li><li>• Researched implementation of natural language processing in Hadoop systems</li><li>• Researched application of machine learning in natural language processing</li></ul>	August 2015 – Present
	<b>Lead Developer</b> <i>ParkingBee, Technology Team   State College, PA</i> <ul style="list-style-type: none"><li>• Built and deployed a MEAN stack web application on Amazon Web Services</li><li>• Company enables subletting of parking spaces resembling Airbnb process</li><li>• Lead product development for IOS, Android and Web applications</li><li>• Website: <a href="http://www.parkingbee.co">www.parkingbee.co</a></li></ul>	May 2016 – Present
	<b>Strategy Consulting Intern</b> <i>Booz Allen Hamilton, Strategic Innovation Group   Washington, DC</i> <ul style="list-style-type: none"><li>• Prototyped hardware platform to detect concentration of lead in water</li><li>• Developed a web application to interface with hardware via RESTful API</li><li>• Wrote technology related aspects of business plan</li></ul>	May 2016 – August 2016
	<b>Information Technology Intern</b> <i>Humana, Enterprise Data and Analytics, Clinical Data   Louisville KY</i> <ul style="list-style-type: none"><li>• Built and deployed a .NET web application</li><li>• Application enabled a business unit within Humana to collect and process data</li><li>• Sourced design requirements and planned project prior to development</li></ul>	May 2015 – August 2015
	<b>Teaching Assistant</b> <i>Penn State, College of Information Science and Technology, State College, PA</i> <ul style="list-style-type: none"><li>• Assisted in the instruction of IST 402 Sensor and Effector Systems</li><li>• Prior to assisting instruction helped redevelop curriculum for the course</li></ul>	Fall 2014 & Spring 2015
<b>Leadership</b>	<b>Director &amp; Founder, Nittany Data Labs</b> <ul style="list-style-type: none"><li>• Lead several data visualization and dashboard projects for Penn State clients</li><li>• Developed a 10 week data science training program for students</li><li>• Original founder of the organization</li></ul>	September 2014 – Present
	<b>Technology Lead, Lion Launch Pad Accelerator</b> <ul style="list-style-type: none"><li>• Part of executive committee running Penn State startup accelerator</li><li>• Accelerator provided equity free funding to student ventures</li><li>• Help multiple student run ventures with technologies solutions</li></ul>	January 2016 – April 2016
	<b>Deputy of Guidance Navigation and Control, Lunar Lion Team</b> <ul style="list-style-type: none"><li>• Lead systems integration on initial test craft</li><li>• Directly worked on hardware integration of new components</li><li>• Worked with serial connections between control unit and sensors</li></ul>	May 2014 – September 2015

**Technology Captain, Penn State IFC/Panhellenic Dance Marathon**

April 2014 – March 2015

- Developed a LAMP stack web application
- Application managed Bryce Jordan Center capacity during THON
- Deployed software in scalable production environment for THON weekend

**Projects****Optimizing Strategy for Ticketmaster**

April 2016

- Utilized Tableau to segment Ticketmaster advertising budget
- Built models to predict click through rates on advertisement
- American Statistical Association Data Fest best overall project and best visualization

**Optimizing Solar System and Buy/Sell Strategies**

February 2016

- Utilized data on smart home battery discharge and charge levels
- Build a strategy for optimal energy buy and sell times
- Build a model to predict hourly energy demand

**Predicting Diabetes with Machine Learning**

September 2015

- Model for identifying if an individual has diabetes
- Tested ability of ZeroR, OneR, Naïve Bayes and C48
- Utilized meta- algorithms including boosting and bagging
- Competed at PennApps hackathon at University of Pennsylvania

**Open Source Multirotor (Quadcopter)**

January 2016 - May 2016

- Built a quadcopter from open source design and parts
- Completed an audit to understand to determine security concerns
- <https://goo.gl/5McOXd>

**Predicting Kidney Disease with Machine Learning**

July 2015

- Model for identifying if an individual has chronic kidney disease and which stage they are in
- Tested ability of ZeroR, OneR, Naïve Bayes and C48
- Achieved 88.4% correct classification by 10 fold cross validation
- Competed at HackHi internal hackathon at Humana

**Targeted Advertising with Machine Learning**

March 2015

- Targeted advertising for Edmunds.com, models built from their data
- Classify user by behavior into class of ad they were most likely to click on
- American Statistical Association Data Fest best overall project and most creative

**Visualization of Sexual Assault Data at Penn State**

November 2015

- Compiled sexual assault data relevant to Penn State
- Utilized MapBox API to plot data on a web based map
- [www.alertpsu.com](http://www.alertpsu.com)

**Development of Curriculum for Sensor and Effector Course**

January 2014 – December 2014

- Sensor and Effector Systems, IST 402
- Arduino based course on fundamentals of embedded programming and circuitry
- Wiki: <https://goo.gl/Myurux>

**Awards**

1<sup>st</sup> Place 2015 ASA Data Fest, 1<sup>st</sup> Place AEC Hackathon, 1<sup>st</sup> Place ASA Data Fest, Best Pitch Overall, 3<sup>rd</sup> Place Hack PSU, Recipient of Undergraduate Discovery Grant, Eagle Scout

**Skills**

JavaScript, Python, Node.js, Express.js, MongoDB, MySQL, HTML/CSS, Perl, C/C++, Linux, .NET  
Machine Learning, Analytics, Consulting, LEAN Product Development, Agile, IT Strategy