RASHMI JAYATHIRTHA RAO

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| Summary | Software developer with expertise in web application development and research experience in data science. Areas of Interest: Web Development, UX Design, Big Data, Machine Learning, Data Analytics |

Education

| Ohio State University, USA (**MS in Computer Science)** | GPA major: 3.49/4 | Graduated : **May 2017** |
| PES Institute of Technology (BE in Computer Engineering) | GPA: 9.07/10 | Graduated: Aug 2013 |

Skills

- **Expert** : Java, Python, lisp, HTML5, CSS, Javascript, Bootstrap, Dojo, jquery
- **Proficient** : R, C, C++,C#, PHP, Matlab, Map/Reduce, Angular JS, D3.js, SQL, MySQL, Spring , Hibernate, TCP/IP Network protocols
- **Knowledgeable** : Hadoop, Spark, Cassandra, HBase, Kafka, Apache Storm, Lambda and Kappa Architecture, Pregel, Giraph
- **Special coursework**: Machine learning, Network science, Wireless sensor networks and Internet of Things(IoT), Network programming,Adv Computer Architecture, 'Data Scientist Specialization' on Coursera from The University of John Hopkins.
- **Tools:** GIT, SVN, Rally, Jira

Work Experience

1. Software Engineer at Cisco Systems   Sep 2013 - Aug 2015

- Designed and developed full stack enterprise web applications for simplified User Experience in Business process re-engineering
- Worked on traceability and intelligence involved in data across release management tools
- Worked on a big-data analytics project that collated data from several diverse sources within Cisco to present insights.
Skills : Java, UI, UX, Web services, HTML, CSS, AJAX, JavaScript, Jquery, Hadoop , Spring framework, Hibernate, RESTful API, CI , MVC framework, Agile product development methodology, cross site scripting and SQL injection vulnerability handling.

Academic Projects

- Worked on an NSF funded research project that analyzes student learning behavior and cognitive bias using logged metadata and Data analytics. Co-developed a graph based e-learning web application with PHP being used by more than 500 students across Columbus,OH.
Skills : Python**,** PHP, Matlab, R, CentOS, Moodle, Jquery, HTML5, Human Computer Interaction(HCI), UI, UX design
- Predicted cognitive recognition from fMRI brain image data using Linear and stochastic gradient descent, clustered and analyzed wine dataset using Expectation Maximization, Performed Qualitative Human Activity prediction in Fitness, Predicted mushroom type to classify it as poisonous or consumable. (Python, Machine learning algorithms)
- **Java based LISP Interpreter:** (Java, lisp)
Developed an interpreter to perform lexical parsing and evaluation on lisp code using recursive descent programming in Java
- **Neural network based hardware branch predictors**: (Linux, C++)
Implemented Perceptron, a Neural Network based Branch Predictor.
- **Analysis of nodal influence and passivity in multi layered networks :** (Python, networkx, Linux, Network Science)
Developed an algorithm and visualized the nodal influence within a multi layer network using page rank and HITS algorithm.
- **Cloud and mobile integration for wireless sensor networks:** (C#, .NET, CoAP,MQTT)
Implemented Constrained Application Protocol (CoAP) on .NET micro framework and designed an IOT network to support cloud connectivity of the emote.

International Journal Publications and Posters

- My research work, "Behaviour and cognitive bias analysis in graph based e-learning using Data Science":
  - Was presented as a poster at the OCWiC, an ACM-women in computing conference in Feb 2017.
  - Has been accepted for The Frontiers in Education 2017, an IEEE Conference.
- Co-author of the paper on "An Interactive Learning Tool for Early Algebra Education: Design, Implementation and Evaluation" which is accepted for The Frontiers in Education 2017, an IEEE Conference.

Accomplishments and Extracurricular activities

- Won the competition for "**Best user interface implementation**" and a "**gold certification**" for continuous software tool delivery at CISCO ; Was awarded the bachelor's level "**National Merit Scholarship**" for academic excellence.
- Developed my state of the art portfolio : **http://rashmijrao.com** using Angular JS along with google analytics tracking.
- Volunteered to teach Math and Science at state run under developed high schools in India as a part of the "Smile", a non profit organization.