MOHANA BANSAL

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EDUCATION

- **University of Maryland, College Park, USA**   **Expected May 2017**
  Masters in Information Management, Specialization: Data Analytics   **GPA: 3.95/4.0**
- **Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal, India**   **Aug 2010- May 2014**
  Bachelors of Engineering in Computer Science Engineering   **(Honors Degree)GPA: 7.99/10**

SKILLS

- Programming languages: R, Python, PHP, Android, JAVA, HTML, CSS, JSP, C/C++
- DBMS   : MySQL, SQL Server, SQLite
- Applications   : R Studio, Spyder, Tableau, Keshif, Jigsaw, NetBeans, Eclipse, Dreamweaver, Microsoft Office

WORK EXPERIENCE

System Analyst   **Jun 2016- Aug 2016**
Sapient Global Markets | Inter American Development Bank   *Arlington, VA*
- Analyzed the current operating system of Inter-American Development Bank and identified the pain points of the system
- Studied and developed an in-depth understanding of the two database systems they used to suggest improvements on them
- Made recommendations on merging of two database systems into one model in alignment of database normalizations standards

Sapient Global Markets | T'Rowe Price   *Arlington, VA*
- Studied and analyzed to provide insights on the data collected from the user survey carried across more than 15 companies
- Compared the trends and visualized the data using Tableau to give a clear understanding of the current situation of product usage
- Created visualizations to compare the ideal situation with the current situation using bar charts and trend lines

Android Developer   **May 2013- Jul 2013**
HCL Infosystems ltd   *Indore, India*
- Devised an entertainment app using MVC design pattern with animations and music player designed for android devices
- Successfully delivered the app along with a dataset at the backend for information storage and retrieval

PROJECTS

Analyzing Crime Rate in Bank Locations   **Aug 2015- Dec 2015**
- Gathered two government datasets with over 35,000 records to understand the different aspects of crime near banks
- Performed data manipulation (wrangling, filtering, cleaning, merging, sorting, deriving new variables) using MS-Excel
- Carried out mixed Factorial ANOVA to analyze the crime rate during different parts of the day in bank locations, using R

Analyzing User Reputation and Quality of Posts in StackExchange   **Feb 2015- May 2015**
- Performed data cleaning on 100,000 records of users and user posts to identify and derive predictor variable in R
- Implemented supervised machine learning methods like Regression, Support Vector Machine, Random Forest to form predictive models; created test and trained dataset in R to test the models; achieved 84% accuracy
- Applied unsupervised learning methods like K-Means, Hierarchical and Density Based Clustering to identify classes of users

Visualizing the Success Rate of the UN's Millennium Development Goals   **Feb 2015- May 2015**
- Created interactive visualizations like world map, bar graphs for in-depth comparison and analysis of all the eight goals.
- Visualized the growth and success rate of the goals using Tableau.

Development of Web Based Bio-Waste Medical System   **Jun 2015- Aug 2015**
- Developed a centralized Biomedical Waste Management System that can track the bio-waste from the point of generation to disposal
- Designed the modules in MySQL and PHP that could perform CRUD operations on hundreds of records

Observing Management Processes of Parkside at College Park   **Feb 2015- May 2015**
- Studied the current management process of Parkside to analyze functional shortcomings that hampers customer service
- Conducted interviews and made recommendation to improve the two pillars of management- planning and management

E-Forum   **Jan 2013- May 2013**
- Created an online Q&A forum for approx. 500 college students to provide them a platform to post any career doubts in JAVA
- Successfully designed and maintained database structure to perform CRUD operations of more than 20000 records in MySQL

Online Banking App   **Jan 2014- May 2014**
- Developed a mobile application intended to handle all the banking transactions in Android and SQLite
- Implemented the modules of the application using MVC design pattern to facilitate seamless user experience

RELEVANT COURSEWORK

Data Analytics for Information Professionals	Introduction to Data Science	Advanced Data Science
Management of Information Programs and Services	Web Enabled Databases	Visual Analytics

EXTRACURRICULAR ACTIVITES

- Served as the president of the student council of approx. 2000 students. Successfully planned and conducted college events
- Lead the team for editing the College Magazine (MIT Chronicles) as chief- editor for an yearly and quarterly editions