### Arun Ram Sankaranarayanan

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#### **Education**

Indiana University May 2017

Masters in Data Science, CGPA 3.42/4

SASTRA University May 2012

Bachelor of Technology in Information and Communication Technology

#### **Technical Skills**

Languages R, SQL, Python, C#, HTML, CSS, PHP, XML, XSLT, Java, C, C++, VBscript

Frameworks Hadoop, Spark, Lucene .NET framework 4.0

Tools Business Intelligence (SSIS&SSAS), Weka, Tableau, MongoDB, MS SharePoint, MS Visio

Machine Learning and Visualization D3.js, Node.js, scikit-learn, Numpy, Pandas, Matplotlib, Seaborn,

# **Professional Experience**

#### School of Informatics and Computing, Indiana University, Bloomington (1 year)

Jan 2016 – May 2017

Lead Associate Instructor - for a course that deals with Logical Diagrams, Web Development and Database management

- Assisting a class of 60 students in their coursework with languages like SQL, PHP, XML, XSLT and HTML.
- Leading a team of 3 Associate instructors by assigning them tasks and managing deadlines on student assignments.

#### BookNPlay, Chennai, India (3 months)

May 2016 - July 2016

Data Scientist Intern - for BookNPlay, a Digital marketing mobile app that has over 10000 customers

- Implemented non parametric matrix factorization techniques to create a customer recommendation system
- Increased company's revenue by 10% by using partial customer preferences data
- Implemented visualization techniques to get an intuitive representation of customer behavior and interests.

#### Tata Consultancy Services, Lloyds Banking project (3 years)

Aug 2012 - Aug 2015

Business Intelligence Database Developer – for Lloyds bank owned credit risk applications

- Saved 10000 Pounds/year by implementing a process automating removal of duplicates using a SSIS package.
- Solved data inflation by removing over 20% of unwanted data from a total data of 2TB, using BI tools like SSIS and SSAS
- Increased the security of a web application by building a secure windows authentication gateway.
- Implemented Verde, a million pound worth project, by following international banking regulations and separating bulk unstructured bank data into two separate partitions Lloyds and TSB with an accuracy result of 90%.

# **Academic Projects**

- <u>Navigation system for visually impaired using Computer Vision</u>

   – Implemented door and obstacle detection algorithms using OpenCV corner detection, sift detection, contour grouping and geometrical heuristics to detect indoor doors and obstacles
- <u>Twitter Data Visualization</u> Implemented sentimental analysis on text data from twitter using NLTK platform and Cartograms to analyze and visualize the support of people in each US state towards electoral candidates Donald Trump and Hillary Clinton.
- <u>Yelp Dataset Challenge</u> Performed user modelling and predicted categories of restaurants that people at Yelp would visit by using matrix factorization and classifiers like Naïve Bayes and Locality Sensitive Hashing (LSH)
- <u>Somatic Mutation Prediction</u> Built a prediction model that predicts somatic mutations from a given SNP and COSMIC data by creating SVM and Random forest statistical models using scikit-learn and analyzing precision and recall metrics.
- <u>Microsoft Academic Graph</u> Built an intelligent system that recommends useful papers for citations using keywords and titles by implementing collaborative filtering using low rank matrix factorization on the Microsoft Academic graph dataset.
- Opiate Prescriber Prediction Built a prediction model that predicts opiate overdose by implementing decision tree with a bagging classifier and Logistic regression models on the US opiate overdose dataset from Kaggle.

### **Certifications and achievement**

Six Sigma Green Belt certification
Star Performer
Gold medalist at the Olympiad National Math competition

Mar 2014 Jun 2013