

# Manu Sreekumar

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**SUMMARY:** Data science Graduate student with 5 years of professional Software Development experience in Banking and Financial Domain. Strong problem solving, public speaking and leadership skills with a deep-rooted passion for data driven analytics.

## EDUCATION

- **Masters of Science: Data Science**  
Illinois Institute of Technology  
GPA: 3.67  
Aug 2017 - present
- **Bachelor of Technology: Electrical and Electronics**  
Federal Institute of Science and Technology  
GPA: 3.5  
Aug 2008 - June 2012

## SKILL SET

**Languages:** Python (NumPy, SciPy, pandas, scikit-learn), R (dplyr, ggplot2, caret), Scala, Java, C#, Scala, SQL, VBA, C, C++.  
**Databases:** Ambari, Apache Hadoop, MapReduce, HBase, MongoDB, Pig, Hive, Cassandra, MySQL, PostgreSQL.  
**Tools/Platforms:** Microsoft Azure, HDFS, Spark, GraphX, MATLAB, MS Excel, Gephi, Tableau.  
**Certifications:** Competent Communicator and Leader Certifications - Toastmasters International.  
**Other:** Expertise in Frequentist and Bayesian Statistics, Predictive Analytics, Machine learning models and Algorithm Optimization

## WORK EXPERIENCE

Tata Consultancy Services, Kochi, India  
Banking and Finance

**Software Analyst Lead** Sep 2015 – July 2017

- Successfully delivered mission critical production enhancements for **American Express** banking software with high quality.
- Drove the projects across various phases of software development lifecycle such as planning, design, implementation, release and support.
- **Trained** over 50 in-house software engineers and clients on automation frameworks, object-oriented languages and banking software platforms.
- Represented the company in decisive client presentations and coordinated with various stakeholders for improving the solutions.
- Championed **Analytics driven** business ideas and presented talk on **Machine Learning** at TCS Client Conference

**Automation Engineer** Nov 2012 – Aug 2015

- Designed and implemented **Hybrid automation framework** for mission critical banking functionalities.
- Reduced the operating and testing costs by 50 percent through successful implementation of automation solutions during production releases.
- Direct interaction with clients across the world to provide solutions using **banking domain knowledge** and **automation expertise**.

## ACADEMIC PROJECTS

**Loan Default Prediction Using Logistic Regression, Illinois Institute of Technology** Aug 2017 – Dec 2017

- Developed an advanced predictive model for providing the loan eligibility criteria using Logistic Regression and Decision Trees.
- R packages were employed to carry out data exploration, cleaning, training, testing and comparing KPIs of the models.

**Telecommunications Data Analysis using Spark GraphX, Illinois Institute of Technology** Aug 2017 – Dec 2017

- Build Graph for analyzing interaction strength using Spark GraphX in Microsoft Azure platform for the city of Milan.
- Implemented various graph operations like Page Rank, Aggregated Messages and Pregel API to identify key stations and interaction patterns.

**Comparison of Prim's and Kruskal's Algorithm in Graph Structures, Illinois Institute of Technology** Aug 2017 – Dec 2017

- Developed a Java application to compare Prim's and Kruskal's algorithms for finding minimum spanning trees in graph structures.
- Employs Union-Find in Kruskal's and Minimum Heap in Prim's to identify MST's.

**Energy Auditing, Federal Institute of Science and Technology** Jan 2012 – Apr 2012

- Successfully lead project team for Energy Auditing of university campus using extensive field research and data analytics.
- Analyzed and identified key features that governed power consumption patterns using MATLAB for devising ways to improve energy efficiency.
- Successfully presented a final thesis that put forth measures to improve energy efficiency by 21 percent in future years.

## AWARDS AND RECOGNITIONS

- **Second prize** in TCS – American Express Hackathon, Tata Consultancy Services – February 2016
- **"Maitree Prize"** (Awards for Excellence), Tata Consultancy Services – December 2013,2014,2015.
- **"Bravo award"** (For Outstanding Dedication, Service Above and Beyond the call of duty), American Express – July 2015.

## ADDITIONAL DETAILS

- **Past President of Toastmasters Club**, TCS Charter, Kochi.
- **Public Speaking enthusiast** - Organized training sessions and cultural events to promote the art of public speaking.
- **Acting and Playwriting** - Won numerous accolades for organizing street dramas and plays towards raising **social awareness**.