**Manu Sreekumar**

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**SUMMARY**: Data scientist at Uptake Technologies. Building data science models for IIOT towards predictive maintenance and condition monitoring automation of heavy equipment. Passionate about building mature data science platforms with minimal maintenance overhead.

# EDUCATION

**Masters of Science: Data Science** Illinois Institute of Technology Aug 2017 – May 2019

**Bachelor of Technology: Electrical and Electronics** Federal Institute of Science and Technology Aug 2008 – June 2012

# SKILL SET

**Languages**: Python (NumPy, SciPy, Pandas, Scikit Learn), R (tidyverse, rcpp), Scala, Java, C#, SQL, C, C++

**Databases:** Ambari, Hadoop, MapReduce, HBase, MongoDB, Pig, Hive, Cassandra, MySQL, PostgreSQL, Neo4j

**Tools/Platforms**: Microsoft Azure, AWS, Apache Spark, GraphX, Gephi, Docker, OpenCV, TensorFlow, GitHub.

**Certifications:** Competent Communicator and Leader Certifications - Toastmasters International.

# ACADEMIC PROJECTS

**Lincoln Park Camera Trap Analytics, Illinois Institute of Technology** Jan 2019 – May 2019

* Improved the Image Analytics Tool for Urban Wildlife Research that identifies specific animals with an overall **accuracy of 83%**
* Applied OpenCV and SciKit Image for image processing, FASTAI using Pytorch for model training and Docker for implementation

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

* Modelled Graphs for analyzing interaction strength using Spark GraphX in Microsoft Azure platform for the city of Milan.
* Implemented graph operations like Page Rank, Aggregated Messages to identify key stations and interaction patterns.

**Public Safety Crime Analysis of Illinois Tech, Illinois Institute of Technology** Jan 2018 – Apr 2018

* Built classification models for predicting serious crime incidents using Decision Trees and Random forests with **87% accuracy**
* Employed R for web scraping, data munging and deployed the model using **RShiny** to visualize crime hotspots.

**Fake News Identification in Reddit Platform, Illinois Institute of Technology** Jan 2018 – Apr 2018

* Conducted social network analysis of Reddit Posts to understand the key characteristics of fake news propagation.
* Applied Natural Language processing on Labelled News and built prediction models using Sci-kit Learn with **89% accuracy.**

**WORK EXPERIENCE**

**Data Scientist, Uptake Technologies** Aug 2019 – Present

* Responsible for building data science models for predicting maintenance routines of heavy equipment Dealers
* Gather business requirements and build data science solutions for improving KPIs in actionable insights and revenue.

**Data Science Intern, Uptake Technologies**  Jan 2019 – May 2019

* Gathered specific use cases across industry verticals and developed tool packages using R for empowering data assessment routines
* Built data science models on IIOT to predict breakdowns of punch presses to reduce downtimes by **20%**

**Software Engineer / Lead, Tata Consultancy Services** Nov 2012 – July 2017

* Successfully delivered mission critical production enhancements projects for **American Express** banking softwareplatform
* Responsible for the R & D of **hybrid automation framework** that resulted in the project cost savings of **300K** during a fiscal year

# AWARDS AND RECOGNITIONS

* **Second prize** in TCS – Amex Hackathon, Tata Consultancy Services
* “**Bravo award**” (For Outstanding Service), American Express Clients

# ADDITIONAL DETAILS

* **Computer Science Teaching Assistant** at Illinois Institute of Technology for Big Data Technologies graduate course.
* **Past President of Toastmasters International**, TCS Kochi. Conducted public speaking training sessions for professionals
* **Acting and Playwriting** - Won numerous accolades for organizing street dramas and plays.