

VIDYA VENKITESWARAN

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EDUCATION

Columbia University, Fu Foundation School of Engineering and Applied Sciences
Master of Science in Computer Science, Machine Learning

New York, NY
Expected Dec, 2017

University of Delhi, Netaji Subhas Institute of Technology
Bachelor of Engineering in Information Technology, 71.66%

New Delhi, India
May, 2014

Relevant Courses: Data Structures, Algorithms, Artificial Intelligence, Machine Learning, Theory of Computation, Database Systems, Operating Systems, Software Engineering, Computer Networks

EXPERIENCE

Software Engineer - Delhivery (SSN Logistics)

Gurgaon, India

Mar, 2015 - Aug, 2016

- Simulated Delhivery's logistic network to build a probabilistic model in order to predict package arrival time with an error estimate
- Built a model to predict category and sub-category of products using Naive Bayes algorithm to achieve an accuracy of 94%. It resulted in product level intelligence improving the item catalog, better item pricing, and enhancing metadata
- Re-architected Addfix (a model to identify locality and sub-locality from uncleaned addresses) by converting it into a Restless API; improved the requests handling from 6 requests/second to 752 requests/second, without any data loss
- Developed a feedback-framework which allows user to tag localities in addresses using frequency analysis(n-grams). This increased the Data-Quality team's efficiency in creating data for Addfix, from 200 addresses per day to 1000 addresses per day

Software Engineer - American Express

Gurgaon, India

Jul, 2014 - Feb, 2015

- Led a project to integrate two systems - Data Warehouse and Data Mart to enable modellers to fetch details corresponding to campaigns and users; enabled data analysts to gather information from one source only and thus, improved creation of models in a faster way
- Developed an application using Python and Hadoop in which libraries for K-NN, Random Forest, and Gradient Boosting are integrated to assign customers' a score, for efficient campaign management; resulted in integration of varied systems under one roof
- Improved in-house Big Data architecture in Amex to handle and manage data in a more systematic and organized way and apply algorithms which improved the efficiency of the systems

Open Source Developer - Mozilla Foundation

Delhi, India

Dec, 2014 - Mar, 2015

- Enhanced Talos (Mozilla's Testing Framework) by fixing deprecated scripts, which resulted in 10% increase in the efficiency of the framework

ACADEMIC PROJECTS

Predict the financial market uncertainties using the conglomerate of search analytics, stock basket correlation and historical data

- Employed a pilot approach of evaluating one company on all three parameters- historical prices, tweets, headlines and Google Trends
- Used Google Analytics to reduce error in prediction and expanding the project to involve various market sectors
- Extended the project to involve Greece Bailout and China Stock Market Crash

Sentiment Analysis of Users' Reviews on IMDB Movies

- Applied Naive Bayes classifier using NLTK in Python to classify reviews into positive or negative class with an accuracy of 74%
- Developed a feature mechanism in Python which selects top N words to classify the reviews. This increased the accuracy to 84%

Detection of anatomical structures in abnormal retinal Images for identifying glaucomatous changes (funded by the Government of India)

- Developed an algorithm to detect optic disc and macula using MATLAB which has a success rate of 90%
- Worked on applying machine learning techniques to identify the optic disc and optimized the algorithm
- Performed a literature survey on optic disc and macula identification on retinal or fundus images

SKILLS

Languages: Python, C, C++, Matlab, \LaTeX , HTML, CSS, JavaScript
Tools/Frameworks: WEKA, Git, LAMP, Hadoop, Disque, RabbitMQ
Data Stores: MySQL, Oracle, PostgreSQL, MongoDB, Redis, Neo4j
AWS: API Gateway, Lambda, SQS, S3
Big Data: Hadoop, MapReduce, Hive

HONORS AND AWARDS

Teaching Assistant: Introduction to Computing, **Columbia University**
Speaker, **WithTheBest Conference for Developers**
The Bolt Champion, **Delhivery(SSN Logistics)**
Merit Scholarship, **University of Delhi**
Cofounder of ACM-NSIT Chapter, **University of Delhi**

Sep, 2016 - Dec, 2016
Sep, 2016
Jul, 2015
Aug, 2013 - May, 2014
Jun, 2013