

# AKSHAY VYAS

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## -----EDUCATION-----

**Rensselaer Polytechnic Institute (RPI)**, Troy, New York, USA

Dec' 2019

Master of Science: *Information Technology* [GPA: 3.87]

**Shri G. S. Institute of Technology & Science (SGSITS)**, Indore, INDIA

May' 2018

Bachelor of Engineering: *Computer Engineering*

## -----EXPERIENCE-----

✓ **Graduate Teaching Assistant**, *Rensselaer Polytechnic Institute*, Troy, NY

Fall'18 - Fall'19

Courses: Introduction to Computer Science (Fall'19), **Data Analytics** (Fall'18, Spring'19), > 250 students.

✓ **Software Engineering & Project Assistant-II Intern**, *New York State Department of Health*, Albany, NY

Summer'19

Contributed to the development of BCI2000, an open-source software project at the *National Center for Adaptive Neurotechnologies*, Health Research Inc., NYSDOH. Achieved better efficiency for several modules by embedding multi-threading, parallelism. Programmed in C++, Python, MATLAB and successfully ported several experiments in BCI2000.

## -----SELECTED PROJECTS-----

✓ Digital Dashboard for **GE Power** - developed as a part of IT Capstone.

Spring'18

-Contributed as Project Manager & Developer and used technologies: *Elasticsearch, Kibana, Python, Data visualization* to create a dashboard that accomplished reduced processing time for various events & displayed various metrics, KPIs.

✓ Tennis Analytics: Predicted the future women's Tennis STAR players.

Spring'18

-Lead the team and analyzed women's tennis data using *Python, R, Jupyter Notebook, IBM SPSS Modeler, Tableau, Elo rating system, M.S. Excel* and predicted the 5 future star players with good accuracy using trends and various metrics.

✓ Restaurant, Cuisine Recommendation & features correlation using Yelp Data.

Fall'18

-Developed an efficient recommendation system using *Python, Neo4j, Big Data, Machine Learning, Data Science*.

✓ Usability testing of the YACS website (a project developed under Rensselaer Center for Open Source)

Fall'18

-Learned & conducted *focus groups, surveys, focus interviews, questionnaires* on a new version of the course scheduling website YACS.

✓ Enhancing the algorithms for solving the Traveling Salesman Problem (TSP) and Simulation of Best Path using a Robot. {*Javascript, C, Research Papers, Robotics*}

Fall'17-Spring'18

✓ Infirmary Management System. {*PL/SQL, JAVA EE, JSP, Angular JS, HTML, CSS, Netbeans*}

Fall'16

✓ Railway Reservation, Enquiry & Catering System. {*SQL, JS, PHP, HTML, CSS*}

Spring'16

## -----SKILLS-----

✓ Programming Adeptness: Python, R, MATLAB, Octave, C, C++, Java(Core SE+EE), Javascript, SQL, MongoDB.

✓ Web Designing: HTML, CSS, Angular JS, React, React-native.

✓ Platforms: Windows XP/Vista/7/8/8.1/10, Linux, Cloudera, Android, Mac OS.

✓ Software Tools: Anaconda, Spyder, Jupyter Notebook, IBM SPSS Modeler, Tableau, Git, Github, Elasticsearch, Kibana, Apache Server, MediaWiki, RStudio, MS Office, Android Studio, Netbeans, Splunk, Neo4j, Knime, Spark.

## -----LICENSES & CERTIFICATIONS-----

✓ **Serverless Data Analysis with Google BigQuery & Cloud Dataflow** (*Google Cloud*), Coursera

Oct'19

✓ **Deep Learning Specialization** (*deeplearning.ai*), Coursera.

Jan'18 – April'18

✓ **Python for Everybody Specialization** (*Univ. of Michigan*), Coursera.

Jan'18 – Mar'18

✓ **Machine Learning** (*Stanford University*), Coursera.

Sept'17 – Oct'17

✓ **Big Data Specialization** (*UC San Diego*), Coursera.

June'16 – Aug'17

## -----SELECTED PUBLICATION-----

✓ Vyas A., et. al. "**Dynamic Simulated Annealing for Solving the Traveling Salesman Problem with Cooling Enhancer and Modified Acceptance Probability**" published in "International Journal of Scientific & Research Publications" 8(3) Mar'18.

## -----SELECTED COURSEWORK-----

✓ Data Science, Applied Analytics & Predictive Modeling, Software Engineering, Algorithms, Data Structures, Databases, A.I., Operating System, Data Mining, Machine Learning from Data, Computational Vision, Big Data Policies.

## -----VOLUNTEERING-----

**National Service Scheme (NSS)**, India

Aug'14 – Mar'16

✓ Volunteered as Coordinator and Member holding *NSS B-level Certificate* & did social-service in several villages.