Arunabh Saikia

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Education

Illinois Institute of Technology, Chicago, USA *August 2019 - May 2021*
M.S. in Computer Science - GPA: **3.7/4.00**
Coursework: Data Structures and Algorithms, Database Organizations, Science of Programming, Software Project Management and Operating Systems

Jorhat Engineering College, India *August 2011 - June 2015*
B.E. in Mechanical Engineering - Percentage: **74%**

Technical Skills

Languages: JavaScript, Python, Java, C
Web Development: ReactJS, HTML5, CSS3, Java Spring MVC
Database Technologies: Oracle, PostgreSQL, Cassandra, Redshift
Machine Learning: Exploratory Data Analysis, Visualization, Regression, Classification, Boosting, Deep learning
Python Libraries: Matplotlib, Seaborn, Numpy, Pandas, Scikit-Learn, Scipy, XGBoost, LightGBM, Keras
CI/CD Tools: Kubernetes, GitHub, Amazon Web Services (AWS)
Certifications: Machine Learning Nanodegree and Artificial Intelligence Nano Degree from Udacity

Professional Experience

Software Engineer, IBM *March 2016 – July 2019*
Bangalore, India

- 3.5 years' experience with full software development lifecycle using Agile Methodologies
- Developed multiple Java Spring applications using Micro-Services architecture and Object-Oriented design
- Collaborated with the in-house development of a new web automation framework for a Telecom Client which reduced the testing time by 70%
- Authored and implemented a custom Data Management Tool to reduce the data validation time by 90%
- Coached and mentored 5 team members, including conducting performance reviews

Project Reviewer and Classroom Mentor, Udacity *January 2018 – July 2019*

- 1.5 years' experience of reviewing projects in Machine Learning, Data Scientist and Data Engineer Nanodegrees
- Mentored students in batches of 25, reviewed implementations for each assignment: doubling the graduation rate

Projects

E-Commerce Website *(GitHub)*

- Created an ER Diagram and engineered a fully functional Electronic Vendor Website using JS, jQuery, Bootstrap, HTML5, CSS3, AJAX and used Oracle SQL to track sales, products, inventory and reorders
- Introduced a UI filter using PHP that categorizes products based on manufacturer, product type
- Configured automated re-ordering of products and inventory update when product quantity drops below 20

Sorting Algorithm Visualizer *(GitHub)*

- Defined a ReactJS based web application that visualizes how sorting algorithms such as Merge Sort works
- Functionality includes generating arrays of random size that is visualized through each sorting step

Data Modelling with Apache Cassandra *(GitHub)*

- Strategized and configured an ETL pipeline for data modeling with Apache Cassandra using Python for a music streaming application, Sparkify
- Application analyzes users' listening pattern, to further suggest similar songs

Human Activity Recognition Using Smartphones Sensor Data *(GitHub)*

- In depth analysis and visualization exploration of how the dataset's underlying features influences prediction
- Leveraged 4 ML Algorithms (SVC, Logistic Regression, LGBM and Keras NN) and compared their performances upon tuning hyperparameters to find the optimum model for the problem at hand
- Achieved a state of the art F1 Score: 99.22% and Log Loss Score of 0.025 with the optimum SVC

Neural Style Transfer *(GitHub)*

- Implemented a script that takes a content image and a style image as input, and outputs a mix of the content and style image using deep learning libraries: Keras and Tensorflow
- Achieved state of the art results in 100 iterations comparable to outputs from mobile app Prisma or web app Deepart.io

Accomplishments

- Received IBM Managers Choice Award for 3 consecutive years
- A Guitarist, Singer and a Speedcuber (3x3 Rubiks cube)
- Authored 1 research paper: 'Design, Fabrication and Performance evaluation of Solar Water Still' published at IJERT