Nitin Kanwar



EDUCATION

THE UNIVERSITY OF TEXAS AT ARLINGTON

MS THESIS IN COMPUTER SCIENCE

3.75 GPA | May 2019 | Arlington, TX

PUNE UNIVERSITY BE IN INFORMATION TECHNOLOGY

3.5 GPA | May 2010 | Pune, India



COURSEWORK

GRADUATE

Machine Learning, Neural Networks, Deep Learning, Reinforcement Learning, Deep Reinforcement Learning, Big Data Systems, Web Data Management, Data Mining, Artificial Intelligence, Distributed Systems

UNDERGRADUATE

Design and Analysis of Algorithms, Data Structures, Database Management Systems, Data warehousing and Business Intelligence



PROGRAMMING

Python, Java, Scala, C, SQL, PHP, Javascript, Matlab, R

MACHINE LEARNING

Numpy, Pandas, TensorFlow, Keras, Scikit-Learn

BUSINESS INTELLIGENCE

MSBI (SSIS, SSRS, SSAS), Talend ETL, iReports, Apache Nifi, Tableau, Amazon RedShfit

DATABASES

Microsoft SOL Server, MySOL. MongoDB, Cassandra, BigTable, HBase

BIG DATA SYSTEMS

Hadoop, Spark, Spark Streaming, MapReduce, Pig Latin, Hive, Kafka, Flume, Flink, Storm, Mahout

METHODOLOGIES

Agile, Waterfall

VERSION CONTROL

Git, Jira, Github, Bitbucket



PORTFOLIO: nitin.kanwar

GITHUB: github/nitinskanwar

LINKEDIN: linkedin/nitin.kanwar

EXPERIENCE

NITOR INFOTECH | LEAD ANALYST | Oct 2015 - Aug 2016 | Pune, India

- Led a team to develop and deploy Talend ETL workflows for migrating data from Oracle DBs to Amazon Redshift.
- Reduced data load delivery time by 72% by creating a robust data quality, error logging and auditing framework.
- · Successfully setup the Talend ETL Centre of Excellence improving the presence of the company in the open source ETL tools vendor market.

DAVIZTA | PROGRAMMER ANALYST | Feb 2013 - Sep 2015 | Pune, India

- Led a team for the development and deployment of a customizable generic ETL workflow using Talend ETL for 2 clients with post-production support.
- Responsible for reducing the end to end development and deployment time by 50%.
- Developed SQL functions and stored procedures using T-SQL on MS SQL Server.
- Developed SQL batch procedures that generate forecasting data for iReports.

ALLSCRIPTS | TECHNICAL ANALYST | Sep 2011 - Jan 2013 | Pune, India

- Developed and deployed a generic ETL solution for migration of PHI data from IBM Informix to MS SQL Server for over 100 customers using SSIS.
- Delivered dashboards and reports using SSRS for department wide project management system to improve the efficiency of inter department workloads by 60%.

DATASTRAITS | JUNIOR ANALYST | Jul 2010 - Aug 2011 | Pune, India

- Developed data-warehouse on MS SQL Server to load pharmaceutical sales data using Talend ETL, SSIS.
- Facilitated sales data analysis using the data-warehouse and SSAS to come up with sales analytics reports reducing the delay in gross calculations by 60%.

RESEARCH

ENERGY SYSTEMS RESEARCH CENTER | GRADUATE RESEARCH ASSISTANT | Aug 2017 - May 2018 | Arlington, TX

- Built a multi-platform IEEE 1584 Arc Flash Hazard Calculation mobile application using Ionic Framework and Telerik Platform project structures which will save thousands of lives of people working in the high electrical power systems.
- · Application development supplemented with the use of Node.js automation which halved application deployment time
- Created automated test scripts using Protractor framework for complete GUI and calculation testing which decreased the work load of the testing team by 70%.

DAVIS, UTA LIBRARY | GRADUATE RESEARCH ASSISTANT | Jun 2018 - Current | Arlington, TX

- Helped hundreds of students and researchers create data visualizations using Tableau and Python.
- Assisted in data management and data publishing of over 30 web pages using HTML, Javascript to LibGuides.
- Created content for and conducting training workshops on Git, R, Python and Tableau for over 100 students.
- Certified Software Carpentry Instructor, delivered workshop on Git and Github.

CLOUD AND BIG DATA LAB | GRADUATE THESIS STUDENT | Jul 2017 - Current | Arlington, TX

- Working towards a thesis on Creating a Portfolio Management Agent using Deep Reinforcement Learning.
- A Deep Neural Network will represent the agent, which will use daily trading data of S&P 500 Index to select 10 stocks and improve the overall portfolio value by the end of testing period.
- Q Learning algorithm will be leveraged to enable the agent to learn in a model free environment.
- Python, Tensorflow, Keras, Numpy, Pandas used for the implementation.

PROJECTS

MAP REDUCE AND APACHE SPARK

- Setup Yarn in pseudo distributed mode. Configured Intel HiBench benchmark and tested the performance of the Yarn setup for MapReduce and Spark frameworks, for multiple job configurations.
- Created matrix multiplication and connected components in a graph program using Scala and Spark.

SENTIMENT ANALYSIS OF TWITTER FEED

- Live tweets fetched by connecting to Twitter API, passed to Spark Streaming application created using Scala
- Classifier model created using Spark Mllib Logistic Regression Classifier and trained using Kaggle Twitter Sentiment Analysis Dataset. Trained model used to classify pre-processed tweets.

WINE CLASSIFIER

- Implemented classification algorithms like Random forest, k-nearest neighbors and Naive Bayes, using Numpy, Pandas and Scikit-Learn, to classify 4875 wine samples in which 75% of data was used as training data.
- Further increased the accuracy of the model by feature selection and engineering, algorithm tuning and cross validation.