Nikhil Oswal

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Github | Linkedin

PROFILE

- Data Science graduate student with four years experience in Agile software development.
- A self-driven leader with excellent communication and interpersonal skills who effectively collaborates foster quality relationships.
- Strong strategic thinking and problem-solving ability to plan, prioritize and organize work effectively.

SKILLS

- **Application Development:** Python, Java, XML, JSON, Web Services
- **Quality Assurance and Testing:** JUnits, Test Driven Development, Selenium, Cucumber
- **UI Technologies:** HTML, CSS, JavaScript, AJAX, Angular JS, Ext JS.
- **Database Technologies:** SQL, Oracle
- **Frameworks and Libraries:** numpy, pandas, matplotlib, plotly, NLTK, sckit-learn, keras, tensorflow
- **Tools:** SVN, GIT, Jenkins, JIRA, Alfresco, SOLR, Lucene

EDUCATION

Ottawa, Canada **University of Ottawa** **Sep 18 – Jan 20**
- Masters in Computer Science specializing in Data Science
- Relevant courses: Systems and Architecture for E-Commerce, Deep Learning and Reinforcement Learning, Data Management for Business Intelligence, Machine Learning, Natural language Processing

Mumbai, India **University of Mumbai** **Jun 10 - May 14**
- Bachelor of Engineering in Information Technology, College Gold Medalist
- Relevant courses: Java, Data Structures, Operating Systems, Software Engineering, Object Oriented Design, Artificial Intelligence, UI Technologies, Internet Security, Web Services, Databases

WORK EXPERIENCE

Amplify Data Scientist **Royal Bank of Canada** **May 19 - Aug 19**
- Collaborated with stakeholders across different lines of business to collect client transactional data and understand the overall data flow and the problem domain.
- Performed exploratory data analysis to find trends and patterns in client transactions with a goal to achieve monetary value.
- Explore and gather supplementary financial stock data such as market stock volume, price, business news, and Twitter sentiments.
- Implement predictive models using the client and supplementary data which would help traders take better informed decisions.

Graduate Teaching Assistant **University of Ottawa** **Sep 18 - Dec 18**
- Teaching Assistant for undergraduate students for Python course
- Conducted programming labs and evaluated there projects and assignments

Associate Software Developer **J. P. Morgan Chase & Co.** **Jul 14 - Aug 18**
- Responsible for end to end SDLC process including continuous partnering with business users, understanding functional requirements and designing, developing, testing, and deploying solutions.

- Contributed to API development; helped applications integrate smoothly avoiding manual intervention.
- Conducted legacy code optimization which resulted in a reduction of approximately 4000 lines of code and improved application performance by 90%.
- Developed end to end automation framework using Selenium for regression/UI testing; helped reduce manual testing efforts from 20 human hours to 4.
- Acted as release manager ensuring smooth and efficient production deployment.

PROFESSIONAL / ACADEMIC PROJECTS

- **Identifying and Categorizing Offensive Language in Social Media (*ongoing*):** Perform text processing and develop Machine Learning & Deep Learning models to identify offensive language, automatically categorize them and identify the target. (*SemEval 2019*)
- **Toxic Content Detection for Quora Dataset (2019):** Implemented SVM, Naive Bayes and LSTM to detect insincere questions to improve online conversations.
- **Corpus Analysis on Social Media Data (2019):** Implemented a word tokenizer for Twitter messages that splits the text into tokens and separates punctuation marks and other symbols using BeautifulSoup, Contractions, NumPy, Matplotlib, NLTK, Textblob and CMU's POS tagger.
- **Text Entailment and Relatedness on SICK Dataset (2019):** Developed and trained Deep learning classifiers (LSTM, RNN, CNN, Bidirectional LSTM) for recognizing textual entailment & semantic relatedness.
- **Rainfall Predictions using Australia Weather Dataset (2019):** Developed Machine Learning classifiers (Logistic Regression, Decision Tree, Random Forest, xgboost) using scikit learn to predict rainfall in Australia
- **Text and Sentiment Analysis for IMDB Dataset (2018)**: Built classifier using RNN and LSTM models to predict positive and negative movie reviews.
- **Performance comparison for VAE, GAN for CIFAR 10 Dataset (2018):** Implemented classifier using GAN and VAE for image generation and compared there performance against different parameters.
- **Predictive / Data Analysis for MNIST Dataset (2018):** Developed classifier using Softmax Regression, MLP and CNN models to predict handwritten digits using MNIST dataset.
- **Website Monitoring Framework (2018)**: Integrated Splunk with a website for user activity tracking and performed log analytics*.*
- **Document and Content Management System (2014 - 2018)**: Designed and developed (at J.P. Morgan Chase & Co.) an application for storing client documents via UI and API services. Main features include recertification of documents, workflow management, API services (upload, download, search, version document).
- **Automation Testing Framework (2015 - 2016)**: Initiated and lead the adoption of Selenium for automation of UI Testing. The framework is browser independent, driven by Excel sheet which holds details on test cases to be executed.

VOLUNTEERING

- Volunteer at uOttawa Free Store
- Technical Lead for a Student Association at University of Mumbai
- Event Head at a Technology Festival at University of Mumbai
- Volunteer at AIESEC