Aseem Raina

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EDUCATION

Master of Science in Computer ScienceAug 2017 - May 2019North Carolina State University, Raleigh, NCGPA 3.63/4.0Bachelor of Engineering in Information TechnologyJune 2013 - Jun 2017University of Pune, Pune, IndiaGPA 9.22/10

EXPERIENCE

Research Assistant – Thesis | North Carolina State University - Raleigh, NC

Aug 2018 – Present

- Project Using real-time multichannel self-regulated learning data to enhance student learning and teachers' decision making with MetaDash | https://goo.gl/oTZaa7 - Machine Learning, Deep Learning, NLP, Temporal Data Fusion
- Investigating methods to achieve time series temporal data fusion, synchronization and clustering between multichannel student data through clustering, revealing insights about trends in student learning based on learning gain.

Developer Summer Analyst, Technology | Barclays Investment Bank - NY

Jun 2018 - Aug 2018

- drDNS Runner | Developed a Django web application for disaster recovery and management to automate the process of DNS failover and failback for the Barclays JARVIS tool. Reduced manual intervention and improved latency by 70%.
- **Loadbalancing Analytics** | Wrote a Python script to handle Ansible orchestration for command execution across several hosts. By adopting a multi-thread approach, reduced the execution time by 50%.

Software Developer Intern | IBM - Cloud and Analytics - Pune, India

Jul 2016 - Jan 2017

- Watson | Developed a test automation framework from scratch for #codename: Eleanor using NodeJS and Mocha/Chai, as part of the development and testing team for IBM ConnectToCloud (C2C).
- Log Analysis | Developed a module for analyzing and extracting metrics from log files, as part of a microservices framework under IT Operations Analytics, using Java and JUnit. Wrote a Python script to generate log files in various formats, thereby reducing manual effort.
- **Bluemix** | Worked as a part of the development and testing team of Bluemix environment for IBM Watson and Predictive Analytics APIs, for log file clustering and analysis including anomaly detection.

SKILLS

Languages Python, Java, C++, C, JavaScript, Embedded C, SQL, R

Frameworks Keras, Pandas, Django, Flask, MySQL/NoSQL, SQLite, Junit, Git, RESTful, Spring, Hibernate, Jenkins, Mocha, Chai, Slack API, Hadoop, Apache Kafka, Node.js, TensorFlow, scikit-learn, Selenium

PROJECTS

Remote Intelligent Assistant for Linux | Machine Learning, NLP

• Developed a Linux based Desktop Assistant using ML and NLP. Converts instructions in English given by user to syntactically correct Linux commands. The application continuously learns and adapts to user feedback. The commands can be run on the user machine remotely using Slack API.

Pre-release Movie Success Prediction | Machine Learning

Developed an application to predict the success of a movie before its actual release. Tried and tested an ensemble of
models including Xgboost and Random Forest after data cleaning and pre-processing. Achieved an accuracy of 64% which
is much more than linear models and previously achieved results.

Shuttlecock Tracking and Trajectory Estimation | Image Processing

 Worked on a project to detect a shuttlecock in the initial phase of its flight and estimate the trajectory using regression concepts, using Microsoft Kinect. The above data was transferred to a robot for successful return of service. Achieved an accuracy of 93%. Published our work in an international journal.

Real Time Traffic Analytics using Social Media Feed | Machine Learning, NLP

• Developed an application to post real time traffic updates to a dashboard, including the possible reasons for congestion (using NLP). Trained a sentiment analysis ML model for the same, achieving an accuracy of 78%.

ACHIEVEMENTS

Best Implementation National 4th /89 and 11th /110 teams Winner First Runner Up National Chemical Laboratory, VertBlue Hackathon, India
ABU Robocon 2014 and 2016, India
Java and C Programming Contest, Maharashtra Institute of Technology, India
Paper Presentation Contest, College of Engineering Pune, Pune, India