

Harsh Waghela

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EDUCATION

University of Southern California	May 2020
Master of Science – Computer Science	GPA: 3.35/4
Coursework: Analysis of Algorithms, AI, Database Systems, Deep Learning	
University of Mumbai	May 2016
Bachelor of Engineering – Information Technology	GPA: 3.72/4
Coursework: Object-oriented programming, Big Data Analytics, Web Programming, Data Mining, Distributed Systems	

TECHNICAL SKILLS

- **Languages:** Java, SQL, Python, Bash Scripting, JavaScript, C++ (STL), HTML
- **Databases and Distributed Platforms:** Sybase, Datastax Cassandra (NoSQL), MySQL, Oracle, IBM Spectrum Symphony
- **Software/OS Knowledge:** Linux, Windows, Jira, Cyberark, Splunk, Service Now, MS Office, Geneos, Git

WORK EXPERIENCE

BNP Paribas (Associate Level 1) **Jun 2016 – Jul 2018**

High Performance Calculation Engine (HPCE) for Counterparty Risk

- Designed and developed a centralized automation script (Bash, Python, REST, Sybase) automating tedious processes covering investigation of common issues and application of workarounds saving 200+ man-hours a year.
- Collaborated on the setup of a time-critical parallel production environment “Tier1” to build and test Disaster Recovery mechanisms achieving high fault tolerance in addition to refining operational stability of Apache Cassandra and IBM Platform Symphony.
- Boosted investigation response time for production incidents by 40% pertaining to debugging of technical defects on HPC tool.
- Chaired fortnightly HPCE problem management meetings improving co-ordination between support and development teams.
- Constructed monthly performance reports using Service Now and analyzed trends leading to enhanced system stability.
- Managed training sessions for new joiners on IBM Symphony and HPCE ensuring a consistent knowledgebase across teams.

Data Integration (DI) for Market and Counterparty Risk

- Implemented monitoring for production issues in Geneos for proactive forecasting of anomalies enhancing system stability by 50%.
- Improved investigation response time of production incidents by 30% by enhancing co-ordination between cross-functional teams.
- Identified gaps in data pipeline, analyzed outlier feeds and recommended improvements to the overall ETL processes.
- Gathered business requirements and performed impact/data analysis to deliver modules using Agile methodology.
- Networked with Stakeholders, Business Analysts and Developers across APAC, EU and the US for prompt issue resolution.

PROJECTS

Stochastic decision-making for navigating a 2-D grid: **Nov 2018 – Nov 2018**

- Executed Reinforcement Learning using value iteration algorithm in Python following Markov’s Decision Process.
- Identified policies to be followed by a vehicle on a 2-D grid to maximize rewards and run randomized simulation tests.

Optimization of space allocation for the homeless: **Oct 2018 – Oct 2018**

- Devised an approach to predict the next best action for utilizing vacant spaces for two agencies in a game-playing environment.
- Engineered a modified version of Mini-Max algorithm in Python where both agencies compete optimally for vacant spaces.

Semantic based Clustering of Documents: **Aug 2015 - Apr 2016**

- Proposed an approach for clustering documents by exploiting semantic information in texts and evaluated cluster quality.
- Harnessed CoreNLP libraries in JAVA to generate and condense semantic graphs, piped to Python scripts for clustering.

ACHIEVEMENTS AND CERTIFICATIONS

1st position at iHack conducted by E-cell at IIT Bombay for team project “Sahyog”.

- Brainstormed with a team of five proposing a web platform for welfare groups assisting in sourcing food from potential donors.

3rd Position at D.J Codeshastra for team project “Annapurna”.

- Collaborated with four to develop a website suggesting users, recipes possible from leftover ingredients.

Course Certifications

- Machine Learning by Stanford University (Coursera)
- DS101: Introduction to Apache Cassandra (Datastax)