

# HARSHIT GUPTA

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## EDUCATION

<b>School of Information Sciences, University of Illinois at Urbana-Champaign, USA</b> Candidate for Master of Science in Information Management. <b>GPA – 3.71</b>	<b>May 2020</b>
<b>Thadomal Shahani Engineering College, University of Mumbai, India</b> Graduated as Bachelor of Engineering in Computer Engineering with First Class. <b>GPA – 7.39</b>	<b>May 2016</b>

## SOFTWARE SKILLS

- Programming Languages/Tools: Java, Python, MySQL, R, HTML, CSS, JavaScript, Boto3, Git, Docker
- Cloud Technologies: AWS EC2, S3, VPC, ECS, RDS, Spark MLlib
- Libraries: NumPy, Pandas, Matplotlib, Scikit-learn, TensorFlow, Keras, Spacy
- Data Science Platforms: Jupyter Notebook, RStudio, Tableau, AWS SageMaker, Google AutoML

## PROFESSIONAL EXPERIENCE

<b>Synchrony Financial, Champaign, USA</b> <i>Data Scientist Intern – Emerging Technology</i>	<b>Oct 2019 - Present</b>
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- Developed an ML solution to classify suspicious merchants helping business reduce reputation risk and illegal transactions.
- Managed tasks for the project team using Kanban agile methodology for quick prototyping and deployment.
- Migrated millions of merchant's data on the AWS RDS MySQL database service reducing operating costs by 30%.
- Developed distributed Spark ML pipelines to label raw datasets to achieving better performance over single node.
- Developed pipelines to scrape merchant's data from the web into existing dataset on AWS S3 using Scrapy framework.
- Developed a predictive model using AWS SageMaker based on Glove embeddings achieving 95% validation accuracy.

<b>Syngenta Digital Innovation Lab, Champaign, USA</b> <i>Data Science Technology Intern</i>	<b>May 2019 – July 2019</b>
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- Lead the process of designing and implementing the architecture of data science platform on AWS cloud.
- Developed a python SDK to connect to private data repositories and create ML environments for quick experimentation.
- Delivered an MVP by implementing ML use cases reducing time to implement data science solutions by 40%.
- Recommended incorporating AutoML features to the cloud solution saving business more than \$100k in annual costs.

<b>School of Information Sciences, UIUC, Champaign, USA</b> <i>Graduate Research Assistant</i>	<b>Jan 2019 - Present</b>
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- Research focused on factors affecting data quality and how scientists make data quality judgment in their field.
- Conducted semi-structured user interviews of scientists based on research questions centered on data quality.
- Analyze interview data using grounded theory to understand the way data are perceived in the scientific community.
- Findings aimed to guide policy decisions in generation and utilization of quality datasets in scientific field.

<b>Research IT Technology Services, UIUC, Champaign, USA</b> <i>Data Analyst</i>	<b>Apr 2019 – July 2019</b>
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- Developed web analytics reports and dashboards using machine data generated from AWS Beanstalk environment.
- Explored Splunk integration with external tools for indexing and visualization of search queries and marketing insights.
- Devised a strategy to integrate data from different sources for user analytics using Splunk Enterprise.
- Used Splunk Machine Learning Toolkit (MLTK) to develop models for anomaly detection, user clustering and web analytics.

<b>Accenture, Mumbai, India</b> <i>Application Development Associate</i>	<b>Nov 2016 – Jan 2018</b>
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- Developed analytics solution to automatically generate business KPIs reducing response time for business decisions.
- Increased efficiency of business services by 20% by writing bash scripts to automate data processing and management.
- Improved internal tools such as system dashboard and logs management with new features reducing manual processing.
- Developed web integrating tool used by project teams to increase cross collaboration increasing productivity by 25%.

## ACHIEVEMENTS/CERTIFICATIONS

- Won **Best Intern Award** in “**Best Technological Innovation**” at Research Park Summer Intern awards.
- Awarded “**Six-Sigma Yellow Belt**” certificate for developing analytics solution and increase customer engagement.
- Completed Udacity's ‘**AI Product Manager**’ and ‘**Neural Network Foundations**’ Nanodegree.

## PROJECTS

### **Dog Breed Classifier – (NumPy, Keras, Scikit-learn, Matplotlib, OpenCV)**

- Developed CNN classifier for 133 dog breeds classes using bottleneck features from a pretrained Xception model.
- Used OpenCV's implementation of Haar feature-based cascade classifier to detect human faces in input images.

### **Adversarial Analysis of Google AudioSet - (NumPy, Pandas, TensorFlow, Scikit-learn, Matplotlib)**

- Implemented multi-level attention model proposed for weakly labeled datasets such as AudioSet for better accuracy.
- Compared impact of Siren attack adversarial technique on the performance of different machine learning models.