

# AJINKYA SAKHARE

GALWAY, IRELAND  
+353-899483034

[ajinkyasakhare19@gmail.com](mailto:ajinkyasakhare19@gmail.com)  
[ajinkya-sakhare](#)  
[ajinkyasakhare19](#)

## COMPETENCIES

- SQL, HIVE
- PYTHON
- RESTFUL API DEVELOPMENT USING FLASK
- SQL, HIVE, HBASE, HADOOP MAPREDUCE
- SCIKIT-LEARN, TENSORFLOW,
- PANDAS, NUMPY
- POWERBI,
- SHELL SCRIPT POWERSHELL

## PROFILE

A seasoned data scientist takes pride in building machine learning and deep learning models to infer raw data insights. I used my skills and experience to solve global clients' challenges, now eager to apply the same to real-world business problems.

## EXPERIENCE

ELECTRIC POWER RESEARCH INSTITUTE. | JULY 2020 - OCTOBER 2020  
**INTERN**

- Worked on internal data visualization library development using Python and SVG.
- Implemented proof of concept on internal Machine learning and Data analysis task.
- Implemented Anomaly detection pipeline for Electrical equipment drone dataset.
- Worked on proof of concept on Generative Adversarial Network (GAN) on image dataset generation.

TATA CONSULTANCY SERVICES LTD. | JULY 2016 - AUGUST 2019  
**SYSTEM ENGINEER**

**CLIENT: MORGAN STANLEY INC. | OCTOBER 2018 - AUGUST 2019**

- Founded center of excellence team for Informatica Intelligence Cloud Services (IICS) and Informatica Big Data Management (BDM).
- Statistical analysis of data using statistical and machine learning models (SVM).
- Automated monitoring and repeated activity such as refresh, maintenance using shell script, Powershell, and Python.
- Streamlined production readiness and Bench-marking for BDM With Hadoop, Hive, PySpark, and Yarn.
- Analyzed and mining activities from large transnational unstructured data in Hadoop data lake.
- Produced visualization dashboards using PowerBI.
- Pioneered the testing methodologies to test new features of IICS and Informatica BDM.
- Maintained IICS and BDM Agents on Windows and Linux environments.

**CLIENT: MICROSOFT INC. | JULY 2016 - OCTOBER 2018**

- Charted and maintained fully automated CI/CD pipelines for code deployment using VSTS Deploy and PowerShell.
- Managed, refined, and oversaw cloud infrastructure on Azure, including backups, patches, and scaling.
- Consolidated underutilized servers and other infrastructure and reduced costs (~\$30,000/-).
- Automated build and deployment using Azure DevOps to reduce human error and speed up production processes and PowerBI reporting for visualization.
- Worked with geographically distributed senior leadership level stakeholders.

## EDUCATION

**MASTERS OF SCIENCE, MAJOR IN ARTIFICIAL INTELLIGENCE**

NATIONAL UNIVERSITY OF IRELAND, GALWAY | 2019 - 2020  
EXPECTED GRADE: 1.1

Modules: Data Science, Time Series analysis, Machine Learning, Reinforcement Learning, Large data analytics, Data Visualization, Computer Vision Pipeline, Data Visualization, etc.

**BACHELORS OF TECHNOLOGY, COMPUTER SCIENCE AND ENGINEERING**

KOLHAPUR UNIVERSITY, KOLHAPUR, INDIA | 2012 - 2016  
CGPA: 8.17

Modules: Object oriented concept, web DEVELOPMENT, restful API, Postgresql, statistics and fuzzy logic

## SKILLS

- Attention to detail
- Process Improvements
- Client Engagement
- Effective & Clear Communicator
- Project Management & Administration
- Quality & Compliance Checks
- Problem Solving
- Critical thinking
- Strong Presentation
- Creative & Analytical thinking
- Resource Planning, Strategy & Operations
- Team player
- Passionate & enthusiastic Learner

## ACADEMIC PROJECTS

### OPTIMIZING NEURAL NETWORKS WITH EVOLUTIONARY ALGORITHMS

- Performance of Feed-forward neural networks depends upon the weights and NN architecture. Optimizing deep neural networks is a complex problem and gradient-based or constructive heuristics will not be able to optimize these. In my MSc research thesis project working on genetic algorithms.
- Distributed Evolutionary Algorithms in Python (DEAP) and other python modules like sklearn, tensorflow, NumPy, pandas, etc.

### TIME SERIES ANALYSIS ON CURRENCY VALUES

- Worked on data gathering and cleaning.
- Analyzed univariate time series and understood covariance, trend, and seasonality.
- Performed statistical tests on data.
- Forecasting using time-series models i.e., ARIM, SARIMA, and SARIMAX.
- Used python modules like sklearn, TensorFlow, NumPy, statsmodels.tsa, pandas

### REINFORCEMENT LEARNING AGENT FOR DETERMINISTIC PROBLEM PRESENTLY WORKING

- Using Python, created a 5x5 grid sized FrozenLake environment along with the necessary methods.
- Implemented Q-learning on the FrozenLake problem to learn a policy which can navigate optimally through the lake.
- Ran the frozen lake experiment for episodes and output the action value estimates at the end of the learning process.
- Applied DQN on a similar problem using Keras to eliminate the value iteration and Q table.

### A DEEP LEARNING COMPUTER VISION PIPELINE FOR OBJECT DETECTION AND CLASSIFICATION

APRIL 2020

- Developed state-of-the-art computer vision pipeline to identify events over incoming video streams using deep learning techniques for object recognition and video analytics.
- The task was to detect object events (car) with specific attributes (car type and car colour).
- Instituted object detector model (TinyYolo) to detect a car in the video.
- Train an existing pre-trained object classifier i.e. Mobilenet from Keras to detect car type example Sedan or hatchback.
- Created an attribute classifier for colour detection of the car using OpenCV.
- Pipeline designed using python along with multiprocessing and queue module for parallel event processing.

## CERTIFICATION AND COURSES

- IBM: Big Data Foundations - Level 1
- DevOps Foundation Certificate
- Microsoft 70-533: Implementing Microsoft Azure Infrastructure Solutions
- ITIL V3 foundation

## EXTRA CURRICULAR

- Awarded as an "Employee of the Quarter Q1-2018" for cost-effective implementation of service improvements to reduce the overhead cost for the client.
- Represented as a class representative for MSc AI 2019 in National University of Ireland, Galway.
- Volunteered for ACCESS department of NUI, Galway open day 2019.

## REFeree

- Dr James MacDermott [Lecturer in Computer Science at National University of Ireland, Galway]  
Email: james.mcdermott@nuigalway.ie
- Mrs Smita Mahapatra [ Technical Lead (Senior Manager) at Morgan Stanley]  
Email: smitamahapatra08@gmail.com