

## Saumya Tiwari

### **1. Personal Details:**

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### **2. Career Objectives:**

To be involved in work where I can utilize skills, enhance my knowledge, talent and creatively involved with system that effectively contributes to the growth of organization.

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### **3. Education**

Degree	Qualification	Year	Institute	Result
Post-Graduation	M.Sc. (Statistics)	2018	Savitribai Phule Pune University	8.57/10
Post-Graduation	M.Sc. (Mathematic)	2016	Savitribai Phule Pune University	5.7/6
Graduation	B.Sc. (Mathematics)	2014	Fergusson College, Pune	90.00%
HSC		2011	Maharashtra State Board	85.00%
SSC		2009	Maharashtra State Board	83.00%

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### **4. Professional Experience**

Accenture Solutions Pvt. Ltd. | 20th July 2018 – Present

#### **Research and Development – Accenture Innovation Hub**

- Part of 1800 AI team, worked on Machine Learning Capabilities such as Regression, Classification, Clustering, Recommender System.
- Developed a sophisticated and highly efficient convolution neural network based on ResNet-50, Inception V3 architecture to localize and classify objects using Transfer Learning.
- Build own deep neural network on Keras, Tensorflow framework to classify objects.
- Pattern extraction and digit recognition from image data using Tesseract's OCR.
- Build a Face Detection, Face Recognition, Object Detection, Object Recognition, Emotion Detection, Age Detection on Video using AWS Rekognition.
- Perform process optimization and model integration.

- Text Classification which includes Text Preprocessing using word tokenization, Text Cleaning by removing stop words, stemming and lemmatization, Descriptive Analysis, Data Exploration and Classification Modelling. Used SMOTE and ADASYN for dealing with imbalanced data.
- Deliver Classroom Trainings on Data Science Tool-kit.
- Work as an integral part of Learning and Management Team.
- Research and Case Studies on Business/Industrial problems and provide data driven solutions.

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## **5. Projects:**

1. A Project on “Questioning the Questions using techniques of Item Response Theory”.  
Project Guide: Dr. T.V.Ramanathan,  
SPPU. Year: 2018 as a curriculum  
project.  
Project Objectives:
  - a) To measure the quality of questions seeing how appropriate they were for the respondents and how well they measured their ability/trait.
2. A Project on “Places Related Almanac Data of 329 communities of USA”. Project Guide: Dr. Akansha Kashikar, SPPU.  
Year: 2017 as a curriculum  
project. Project Objectives:
  - a) The communities are rated on the basis of 9 criteria such as Terrain and Climate, Housing, Crime, Education, Transportation etc. and PCA and Factor Analysis technique was carried out on them to extract important PCs and Factors that explains the variation in data.
  - b) Cluster analysis was performed on the 329 communities and they were divided into 5 clusters based on the data.
3. Project on Differential Equations and Dynamical Systems.  
Project Guide: Dr. Anupam Singh, Indian Institute of Science education and Research (ISSER) Pune.  
Year: 2014 as Research Project:  
Project Objectives: To study use of Differential Equations in medicine for modelling cancer growth or the spread of disease and use of Differential Equations in other fields.

## **6. Software Skills:**

Python, R-software, R-Studio, Knowledge in PySpark programming, Minitab, Microsoft Office, LaTeX.

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## **7. Certification:**

- 70 – 774 Perform Data Science using Azure Machine Learning. Date: June 27, 2019  
Issued By: Microsoft Corporation
- Google Cloud Platform Big Data and Machine Learning Fundamentals from Coursera.
- Cloudera University Developer Training for Spark and Hadoop from Cloudera University.
- Deep Learning specialization consisting of 5 courses from Coursera.
- Supervised and Unsupervised Learning from Data Camp.

## **8. Achievements:**

- Received ACE award (Accenture Celebrates Excellence) in Q1 FY 2019 in Innovation Category.
  - Received ACE award (Accenture Celebrates Excellence) in Q3 FY 2019 in Teams Category.
  - Scholarship holder at Department of Statistics and Center for Advanced Studies awarded by PFIZER pharmaceutical company to meritorious students. (2016 – 2018)
  - Received “Gunwant” Scholarship Award offered by Pune University based on graduation result MSc (2016).
  - Got selected for IASc-INSA-NASI summer research fellowship in 2014.
  - Selected for Mathematics Training and Talent Search Programme 2013 organized by SVNIT, Surat, Gujarat.
  - Awarded Late Sou Manormabai Narayan Dandvate prize for Topper in S.Y.B.Sc. in 2012.
  - Received Scholarship Award under the Science Pursuit for INSPIRE by virtue of performance within top 1% of the board at class XII level. (2011)
  - Received Most Sincere Student Award in (2013-2014 batch) T.Y. B.Sc., Attendance Award, Best Friend to Everyone Award in (2008-2009 batch) 10th standard, Best Manners Award in (2006-2007 batch) 8th standard.
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### **9. Other activities**

- Member of “Statistika” group a departmental fest organized by Fergusson College, Pune (2012-14).
- Participation in the “Amrutvarsha” event as a helping hand for the farmers.
- Conducted doubt session classes for S.Y. B.Sc. and F.Y. B.Sc. students in college.
- Volunteered for various departmental and cultural fests at college and school level.

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### **10. DECLARATION:**

I hereby declare that the information furnished above is true to the best of my knowledge.

Place: Bangalore

Date: 22<sup>nd</sup> August 2019

Saumya Tiwari