

Sunayana Gupta

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SUMMARY

Agile Computer Science Graduate with experience in data engineering, software development, and data science, seeking internship opportunities in summer 2022 at your innovative company.

EDUCATION

M.S. Computer Science

Arizona State University, Tempe, AZ

August 2021- Expected May 2023

B.S. Electrical Engineering

Malaviya National Institute of Technology, Jaipur, India

May 2015- May 2019

TECHNICAL SKILLS

Programming Languages: Java, Python, C/C++, Bash, Matlab

Front-End: HTML, CSS, Android Development

Technologies: Machine Learning, Deep Learning, Data Visualization, Data Engineering, and Analysis

Tools, Databases: Git, GitHub, Linux/Unix, Teradata, Google Cloud Platform, Advanced SQL

Frameworks: Tensorflow, Keras, Pytorch, Spring Boot

Certifications: Neural Network & Deep Learning, GCP Specialization(Coursera), Agile Foundation (NASBA)

PUBLICATION

Sunayana Gupta*, Anudeep Reddy, Yashi Baldaniya, Dr. Rajesh Kumar authored "Hybrid Random Forest and Particle Swarm Optimization Algorithm for Solar Radiation Prediction", IEEE 5th ICCCA.

PROFESSIONAL EXPERIENCE

HSBC Technology: Software Engineer *Hyderabad, India*

07/2019 - 07/2021

- Implemented Teradata to **cloud** migration for U.S.-based data using **Python**, GCP Pub/Sub, and **Dataflow**.
- Developed data infrastructure and analytic tools in **Cloud** and legacy systems using Shell Scripting, and GCP.
- Facilitated automated data surveillance across 34 countries' customer and transaction data using **Teradata**, and **BigQuery** and **Shell Scripting**.
- Identified and addressed the user-raised issues in 13 HSBC digital apps across platforms by Extracting and processing 1000s of publicly available app reviews using **sentiment analysis**.
- Built REST Endpoints using **Spring** and **Spring Boot** framework for fetching financial data stored in Db2.
- Received the Innovation Star Award for my performance in HSBC Technologies in **Cloud migration** projects.

IIT Delhi: Research Intern *Delhi, India*

08/2018 - 02/2019

- Proposed Functional observer algorithm based on Scaler Observer which decreased the computation time by 32% using **Matlab** programming and simulation.
- Designed controller, observer co-design using iterative technique and LMI to achieve asymptotic stability.
- Bagged Best Internship Award by TEQIP(MNIT) along with my team for Research Internship at IIT Delhi.(2018)

RELEVANT PROJECTS

Abnormality Detection in Radiographs *Major Project*

Fall 2018

- Programmed a **deep learning** model using transfer learning with Inception V3 using **python**.
- Detected abnormality in X-rays automatically with an accuracy of 92%.
- Localized the abnormality in a 256X256 Musculoskeletal Radiograph using Class Activation Mapping technique.

MPC of Electric Drives *Class Project*

Summer 2018

- Formulated a finite control set model predictive torque control of induction machine using **Matlab**.
- Achieved 45% faster response and allowed non-linearity and constraints to be incorporated directly.
- Revamped the system stability by 20% by settling the torque ripples faster than other control techniques.

Hybrid RF-PSO model *Class Project*

Winter 2018

- Designed a hybrid **Random Forest-Particle Swarm Optimization** algorithm for the prediction of Solar radiation with an accuracy of 95.2%.
- Leveraged the out-of-bag points on each iteration of **PSO** to calculate the performance of the current model.
- Enhanced performance of the PV generation system by 27 percent using **Machine Learning**.

EXTRACURRICULAR EXPERIENCE

Technical Society, MNIT Jaipur

06/2018 - 07/2019

- President - Technical Society, CACS, MNIT Jaipur, coordinated monthly events and instructed ML enthusiasts.

