




SOUNDARYA GANESH

Software Engineer at JPMorgan Chase & Co.

Programming Languages: C, Python, R, Java*

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EDUCATION

PES University, Bangalore, India

Aug 2018- Jun 2022

B.Tech. in Computer Science and Engineering. CGPA: 8.34/10

- Specialization in Machine Learning and Data Science
- Relevant Coursework: Data Structures & Algorithms, Database Systems, Software Engineering, Discrete Mathematics, Big Data, Data Analytics, Cloud Computing, Machine Intelligence, Computer Networks, Operating Systems, Data Science, Deep Learning, Algorithms for Intelligence Web and Information Retrieval
- Distinction Award- PES University- 2018-19 and 2019-2020; MRD Scholarship 2022

EXPERIENCE

Software Engineer- JPMorgan Chase & Co., Bangalore

Jan 2022- Present

- Working on projects involving Cloud(AWS), Java, Python, Spark, Hive, ETL Development, Teradata, Linux/Unix, and Hadoop.
- One among 59 people across JPMC globally to have secured the Deepracer License, White Paper presentation competitions.

Teaching Assistant: Machine Intelligence course- PES University, Bangalore

May 2021- Dec 2021

- Working on creating course materials including course slides, concise notes, designing and evaluating coding assignments, and organizing quizzes for over 620 students.

Data Science Intern- Mphasis NEXT Labs, Bangalore

Jun 2021 - Aug 2021

- Developed 2 AWS Marketplace Listings (1) to assist consumer finance companies to make lending decisions to mitigate potential loan defaults [link] (2) to detect Healthcare Fraud by building a Machine Learning solution in Python. [link]
- Built a BERT Based solution to perform Aspect-based sentiment analysis on e-commerce product reviews in Python
- Developed a Modularized Angular Website for PACE-ML MLOps Platform - using flask as the backend framework.

Head of Information Design- PES Open Source, PES University, Bangalore

Jan 2020 - Jan 2021

- Responsible for designing and organizing workshops with over 140 students by coordinating with mentors and subject matter experts with a focus on providing enriching learning experience.
- Conducted weekly knowledge exchange sessions/events (like Hacktoberfest) to promote Open Source culture.

AI Research Intern- UNX Life, Bangalore

Mar 2020 - Sept 2020

- Worked on a chatbot development project for people requiring counseling assistance.
- Developed a web app with a deep learning-based solution for index-based facial emotion recognition.
- Researched and implemented Generative Adversarial Networks (GANs) for facial image generation.

Teaching Assistant: Introduction to Data Science course – PES University, Bangalore

Aug 2019- Dec 2019

- Worked on creating course materials with concise notes, extra coding assignments (in Python and R), and conducting weekly review sessions for over 50 students.

Research Intern – NIT, Tiruchirappalli

Jun 2019- Jul 2019

- Pre-processing for an NLP task and Relation Extraction from documents, implemented in Python.
- Explored Protégé-Based Ontology Knowledge Representation (OWL method)

PROJECTS

ML & Deep Learning: Detection of onset of Parkinson's Disease (Selected for oral presentation at ICICC 2024 (7th Edition))

- Developed a cost-free self-diagnostic tool for detecting Parkinson's Disease using multiple non-invasive biomarkers using Machine Learning and Deep Learning models implemented in Python.

Big Data & Computer Networks: Yet Another Centralized Scheduler

- Created a Python-based tool to manage the resources and simulate centralized scheduling policies in a distributed setting

ML & Deep Learning: Bank Customer Churn Prediction

- Developed a Differentially Private Neural Network with TensorFlow Privacy by performing a combination of data redaction and data coarsening to estimate the privacy protection parameter in Python.

LEADERSHIP AND AWARDS

Global Top 5 JPMC Deepracer League Achievement - Key member of top Indian team, selected from 3300 participants.

Demonstrated expertise in Reinforcement Learning, Python, and AWS. Presented an optimized Raceline Solution to Senior Leadership.

MRD Scholarship Award- PES University, Bangalore- Scholarship was awarded for being in the top 20% of the batch, for achieving academic excellence.

Notable Mention- Decypher Hackathon-PES University, Bangalore- Ranked #4 out of 80+ teams for the prototype developed during a nationwide 48-hour virtual hackathon and received a CIE Student Startup Program Sponsorship.

SKILLS

Libraries: TensorFlow, NumPy, Pandas, scikit-learn, SciPy, NLTK, spaCy

Technologies & Frameworks: Hadoop, Apache Spark, HTML/CSS, MySQL, PostgreSQL, Git, Angular, Flask, MapReduce

ADDITIONAL INFORMATION

Courses - AWS Cloud Practitioner [certificate], Architecting with Google Compute Engine [Specialization certificate], Machine Learning: Coursera: Andrew NG, Deep Learning and Computer Vision, SSD & GANs, NLP, Blockchain and Money, Terraform*

Hobbies & Interests - Singer, yoga, linguaphile, sketching, chess (Zonal Level - School Games Federation of India), and writing