

SOURABH RAJA MURALI

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EDUCATION

University of California San Diego

Graduation Date: Jun 2023

Master of Science in Computer Science, AI Specialization, GPA: 4/4

- Relevant Coursework: Probabilistic Reasoning, Recommender Systems & Web Mining, Algorithms

PES University, Bangalore, India

Aug 2019

Bachelor of Technology in Computer Science and Engineering, Data Science Specialization, GPA: 9.38/10

- Recipient of CNR Rao Merit Scholarship and Distinction Awards (8 semesters)
- Courses: AI, NLP, Advance ML, Deep Learning, Data Science, DBMS, Data Structures & Algorithms

RELEVANT PUBLICATIONS

1. Automated NER, Sentiment Analysis and Toxic Comment Classification for a Goal-Oriented Chatbot at “The Fourth International Conference on Intelligent Computing in Data Sciences ICDS2020”, Fez Morocco [Publication](#)
2. Course Finder Based on An Ensemble of Similarities & Social Network Analysis at 2019 IEEE Students Conference on Engineering and Systems (SCES), Allahabad, India [Publication](#)

RELEVANT WORK EXPERIENCE

UC San Diego

Graduate Teaching Assistant

- Teaching & guiding non CS background students to code in Python programming Jan 2022- Mar 2022
- Mentored 300 students in developing a product, following agile practices and software principles. Sept 2021-Dec 2021

Fiserv Inc.

Bangalore, India

Senior Associate, Statistical Analysis

Nov 2020 - Jul 2021

- Increased the efficiency of report generation process and quality checks by 60% through automation in R
- Developed a predictive model to prioritize and target merchants which resulted in Sales team's onboarding rate by 40%
- Steered collaboration between Marketing and Analytics teams along with client communication across the US and Costa Rica region for the Merchant Acquisition Project
- Awarded the “Fiserv Living Proof Award” 3 times for the remarkable work

Associate, Data Science

Aug 2019 - Nov 2020

- Worked on unboxing the black box models such that results are convincing to the clients
- Implemented a Merchant Attrition model to suggest the underlying reasons & was leveraged by the Sales team.

Hewlett Packard Enterprise

Bangalore, India

Software Engineering Intern

Jan 2019 - Jun 2019

- Developed a Python tool to port various server configurations & workloads from C7000 flavor of Servers to Synergy.
- Worked on “Smart Policing for Modern Cities” involving crime rate prediction, crime type classification and patrol area suggestion for a prominent Police force using time series analysis (ARMA, ARIMA) & achieved an accuracy of 87%

SUNY Binghamton

Binghamton, NY

Research Intern

May 2018 - Jul 2018

- Researched on “Microblog Entity Mention Detection with Multi-pass Lightweight Computations” to detect non-entity word in the tweets so that the input to the main system for Entity Recognition has less numbers of words to be tagged.

TECHNICAL SKILLS

Languages: Python, Java, SQL, R, HTML, Angular, JavaScript, CSS

Frameworks/Libraries: Keras, Tensorflow, PyTorch, Sklearn, Xgboost NLTK, Pandas, Numpy, Flask, Graphviz, ULMFit

PROJECTS

Personalization Recommendation Engine on Google Local Reviews | Python(Sklearn, FastFM, numpy, Surprise) Nov 2021

- Built a factorization machine leveraging location based, user-based attributes to accommodate personalization and recommend places for users' next visit on the Google Local Reviews dataset

PESUBot | Python (Sklearn, Keras, Tensorflow, FLAIR, NLTK, Textblob, Flask) | [Code](#)

May 2019

- Engineered a chatbot meant to serve as a receptionist for PES University leveraging BERT, ULMFit, FLAIR & LSTMs
- Designed 3 modules – Named Entity Recognition module in Indian and generalized context, Profanity Detection to sanitize the chatbot responses & Sentiment Module to provide sentiment shades to make it more user interactive
- PESUBot went live where about 2000 freshman and parents interacted with it on the Inaugural Convocation 2020

Oto-Valuator | Python (Sklearn, Numpy, Pandas, Gensim, Flask) | [Code](#)

Jan 2019

- Devised an automatic answer evaluation system to grade the student responses based on the presence of the required keywords and sentence parity to the key answer.
- Leveraged semantic features extracted using GenSim and fed it to a regressor to predict the scores (marks in this case).
- Reduced the workload of the faculty in evaluating the student responses automating the process