

SUDHARSAN JANA

sjanard@ncsu.edu

[LinkedIn](#)

+1-984-322-1614

[GitHub](#)

Raleigh, NC

EDUCATION

M.Sc Computer Science

Aug. 2021 – May. 2023

North Carolina State University, Raleigh, NC

Fall Coursework - Algorithmic Learning and Data Analysis; Database Management Systems; Design and Analysis of Algorithms.

Spring Coursework - Operating Systems; Computer Networks ; Building Game AI.

B.E Computer Science

Aug. 2017 – Jun.2021

Anna University, Chennai, India

CGPA - 8.73/10.0

TECHNICAL SKILLS

Languages and Databases: Python, C/C++, Oracle, MySQL, MongoDB, JavaScript, Java, HTML/CSS

Frameworks: React, Node.js, Django, RASA, TensorFlow, scikit-learn, NumPy, pandas, matplotlib, OpenCV

Others: Git, Linux, VSCode, Heroku, MS Visio

WORK EXPERIENCE

Software Developer Intern

Sep. 2020 – Nov. 2020

Steerclear Technologies, Chennai, India

- Developed an intelligent and interactive recommendation chatbot to help retail consumers (fashion) get personalized product recommendations.
 - Used a Pythonic framework called RASA that utilizes principles in Natural Language Processing.
- Helped develop a marketplace website to connect companies to freelance technical consultants.
 - Learned and utilized the Django – MySQL web development stack and deployed the application using Git and Heroku.
 - Helped a team of three software engineers in building the website.

ACCOMPLISHMENTS

Winner - Smart India Hackathon 2020

Aug. 2020

- Secured First place for creating software that detects and reports malpractices in the Indian Government's mid-day meal scheme.
- Built a Deep Learning object detection model called YOLO (You Only Look Once), that uses Computer Vision to detect food plates.
- Coupled the model with the MQTT protocol to send messages on a subscription basis to alert malpractices onto a web application.
- Implemented the software and its API endpoints using Django, utilized CISCO's Meraki API for fetching live camera data and deployed the final product on Heroku.
- Incorporated feedback from judges and various stakeholders to iterate on the product.
- Leveraged Git to collaborate with a team of six engineers.

PROJECTS

Marketplace Customer Loyalty Program

Sep. 2021 – Nov. 2021

- Created the backend for a marketplace application to enable partner brands to customize loyalty programs to their choice.
- Provided functionalities such as loyalty tiers, loyalty points redemption, customer wallet, referrals, and rewards.
- Customized the marketplace interface for each user category - administrators, brand owners and customers
- Formulated the application logic using Java, used Oracle to create the backend and MS Visio for database design.

Sudoku Solver using Deep Learning

Sep. 2021 – Nov. 2021

- Developed a application that solves Sudoku puzzles using Deep Learning and Backtracking algorithm.
- Performed a comparative study between various Deep Learning algorithms such as Convolutional Neural Networks (CNN's), Regional Based-CNNs and Localization based Deep Learning algorithms.
- Executed image processing using OpenCV on a testing dataset of 160 real-life sudoku images and trained the Deep Learning algorithms using the Typeface MNIST dataset (29000 images).

Vice President Quiz Club

Jul. 2019 – May. 2021

- Captained the university quiz club Athenium across various events and conducted several cross-college quiz competitions.

Freelance Web Development

Jun. 2018 – Sep. 2020

- Engineered multiple iterations of a web application for a budding musician using technologies such as HTML, CSS, and vanilla JavaScript.
- Responsible for the creation and maintenance of University's ACM student chapter's websites and online presence using Node.js and MySQL.

CERTIFICATIONS

- [The Web Developer Bootcamp](#) on Udemy
- [Python for Data Science and Machine Learning Bootcamp](#) on Udemy
- [Data Structures and Algorithms: Deep Dive Using Java](#) on Udemy