

SUDIPTI SHARMA

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TECHNICAL SKILLS

Languages Python, C++, C#, LaTeX, SQL
Software Microsoft Excel, Git, Canoe, Mobaxterm, Dremio, Airflow
Web skills HTML5, CSS, JavaScript, JQuery, Flask, .NET, Node.js, React.js

PROFESSIONAL EXPERIENCE

General Motors

June 2023 - Present

Software Engineer (Integration) — Data Collection (ADAS)

Warren, MI

- Conducted performance benchmarking of SSDs for data collection cars, contributing to the successful implementation of 8 16TB storage systems used to collect 24 hours a week worth of data.
- Contributed to the development of a target-based alignment method that reduced the time to align the LiDAR to the camera on a vehicle from days to under 1 hour, significantly improving system efficiency.
- Automated the CTM(Camera transform matrix) update process in the data pipeline, significantly reducing manual effort and saving valuable time.
- Developed features on a web server to generate optimized routes for data collection, leveraging **Python** to extract data from **Dremio** using **SQL**, enabling the operations team to create efficient routes for Roush drivers and improving operational efficiency.
- Implemented comprehensive tests for front-end **React.js** components to resolve code errors, and refactored the code adopting MVC structure to improve code stability, and reliability.

Platform Software Developer — Software Modeling (ADAS)

Warren, MI

- Responsible for testing the integrity and communication of Signals and Protocol Data Units (PDUs) exchanged between ADAS components, including CAN, and Ethernet bus signals, ensuring proper data sequencing and system reliability.
- Automated testing scripts for ADAS signals, reducing redundant manual tasks, saving a week of work and increasing accuracy by eliminating human error.
- Collaborated with modeling and development teams to ensure seamless handoff of validated models, improving system reliability and accelerating project timelines.

UNLV-Forest Inventory and Analysis (FIA)-USDA

September 2021 - May 2023

Software Developer

Las Vegas, NV

- Developed and designed government websites DATIM and EVALIDator using **.NET framework** and **MySQL** database, which showcase thousands of data points on forest types, tree species, land use, and related environmental metrics, used by USDA employees for analysis and decision-making.
- Assisted in improving website accessibility by implementing Section 508 compliance standards. Used tools like ANDI and NVDA to ensure usability for individuals with disabilities, including those with visual impairments.

Townsquare Interactive

September 2021 - December 2021

Digital Intern

Remote

- Used libraries and tools such as React, **Bootstrap**, **Nodejs**, **Express**, **EmailJS**, and mongoDB to create a website which was approved as a use case for the company.

PROJECTS

DFSS Project Green Belt

January 2021

- Core Affinity Automation

Social Media Application

January 2021

- Developed a full-stack web application with user registration, authentication, video upload, and chat features, while optimizing the app based on core UX principles to enhance performance and user experience.

2D Game

June 2020

- Developed a 2D shooting game in **C++** on a **Linux** environment, incorporating obstacles, enemies, and coins, while using N-curses for a GUI-like experience and debugging to resolve issues.

EDUCATION

Georgia Institute of Technology

Expected 2027

Masters in Computer Science — Computational Perception and Robotics

University of Nevada Las Vegas

Graduated 2022

B.S. in Computer Science

3.7/4.0