Sanjana Shivananda

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EDUCATION

Arizona State University — Tempe, AZ
Master's in Computer Science — *Aug. 2023 – May 2025*

Dayananda Sagar College of Engineering — Bangalore, IN
Bachelor of Engineering in Information Science and Engineering — *Aug. 2018 – May 2022*

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, HTML/CSS, C++
DBMS: MySQL, MongoDB, PostgreSQL, Firebase
Frameworks: React, Express.js, Node.js, Bootstrap, Material UI, Flask, Django
Developer Tools: Git, Postman, Katalon
Libraries: Pandas, NumPy, Matplotlib, scikit-learn, TensorFlow, PyTorch

EXPERIENCE

Associate — Sep. 2022 – July 2023
PricewaterhouseCoopers Acceleration Centers — *Bengaluru, Karnataka*
- Partnered with product managers and clients to gather website requirements and user stories for agile development processes
- Automated software testing processes using Katalon, slashing testing time by 30% and bolstering software quality, leading to a noteworthy 12% decrease in post-release defects
- Cultivated global client interactions, adeptly fostering collaboration with clients from diverse geographic backgrounds

Web Development Intern — Apr. 2022 – Aug. 2022
Kaatru - Indian Institute of Technology, Madras — *Remote*
- Engineered real-time air quality websites using the MERN stack, incorporating Chart.js for data visualization and Leaflet for interactive maps, leading to a 70% increase in data accessibility
- Spearheaded the development of user-friendly websites and interactive dashboards, enabling real-time data download and visualization, leading to a significant 60% increase in user engagement
- Mentored and guided a team of 4 interns, fostering professional growth and achieving a 40% increase in productivity through weekly code reviews and collaborative troubleshooting sessions

Instructor — July 2020 – Sep. 2020
Campk12 — *Remote*
- Orchestrated comprehensive programming training sessions for high school and middle school students, nurturing students' coding passion while imparting programming fundamentals in JavaScript and Python; mentored over 50 students
- Coordinated curriculum development to align with the latest industry trends and educational standards, improving curriculum relevance by 30%

PROJECTS

Optimizing Video Object Detection with Feature-Based Compression | *Python, TensorFlow* — Nov. 2023
- Engineered a video compression method employing transformer-based object importance maps, elevating YOLOv5 object detection accuracy (mean average precision) by 15%.
- Investigated video compression and bit allocation techniques, utilizing object importance maps to boost object detection accuracy.

Mood based Music Recommendation System:Viby | *MERN Stack, Python, Flask* — May 2022
- Engineered a music recommendation system recognizing the user's emotional state and mitigating negative emotions during interactions with the chatbot.
- Implemented Machine Learning and NLP algorithms using Python and deployed the solutions using Heroku.
- Constructed a Web Application using the MERN stack to enhance communication between users and the chatbot.

ACHIEVEMENTS AND EXTRACURRICULAR

- "Best Innovative Project" award for Mood-based Music Recommendation System at DSCE open day
- Volunteered 100+ hours at Akshaya Patra, ISKCON, improving education for underprivileged children
- Led DSCE Literary Club, served as the Master of Ceremonies for various events that attracted 800+ attendee