AVANISH SHILPI

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EDUCATION

The University of Texas at Austin

May 2027

Bachelor of Science in Computer Science, Minors in Business and Law/Justice/Society

Relevant Coursework: Data Structures & Algorithms, Computer Organization and Architecture, Discrete Mathematics

TECHNICAL SKILLS

Programming Languages: Python, Java, JavaScript, C++, Swift, HTML, CSS, SQL

Frameworks: Django, React, TensorFlow, Keras, scikit-learn, NumPy, JQuery, Flask, PyTorch

WORK EXPERIENCE

The Walt Disney Company - Incoming Software Engineer Intern

May 2024 - Aug 2024

UT Austin Meyers Lab - Research Assistant

Sept 2023 - Present

- Engineered a Python-based scraper with Selenium, complemented by data manipulation techniques using Pandas, to gather and process adult ICU bed availability from the American Hospital Directory
- Developed an Two-Step Floating Catchment Area (2SFCA) model using Python, which analyzed a dataset comprising over 500,000 healthcare data points, enhancing the understanding of hospital capacity
- Enhanced hospital admission predictions by 34% and aided resource management amid pandemic peaks

Tecmend - Software Engineer Intern

June 2023 - Aug 2023

- Utilized React framework, HTML/CSS, and JavaScript to engineer and develop Tecmend Connect—a comprehensive data integration platform that merges data from multiple CRM and ERP systems
- Optimized back-end servers and middleware services, achieving 30% reduction in bi-directional data latency
- Developed a Django-based service using GraphQL, focusing on the extraction and visualization of Key Performance Indicators (KPIs) for client analysis, leading to a 20% increase in client engagement

iCode - Lead Instructor July 2022 - Aug 2023

- Designed an educational website called Quizzical, integrating a Trivia API to enhance interactive learning. Observed a significant 40% increase in student proficiency, by pre- and post-camp assessments.
- Led educational camps with a participation of over 150 students, focusing on emerging technologies such as Artificial Intelligence. Provided hands-on Python programming instruction,

The Healing Kidneys Institute - App Development Intern

July 2021 - Aug 2021

- Developed a Swift-based nephrology app, used by 35+ nephrologists for managing 200+ diabetic patients, resulting in a 23% boost in patient monitoring efficiency and 35% less administrative time
- Designed app achieving a 95% user satisfaction rating, with features that streamlined workflows

PERSONAL PROJECTS

Huffman Coding

2023

Implemented Huffman Coding in Java for file decompression, crafting an algorithm for lossless compression of diverse files, including audio and images, ensuring data integrity and efficient storage.

Quantitative AI Trading Bot

2023

Utilized Long Short-Term Memory networks (LSTMs) to train on historical intraday data collected at 1-minute intervals, resulting in the development of an autonomous stock trading bot.

Weather Run

2023

Created a React-based website using HTML, CSS, TypeScript, featuring a user preference system for running times based on real-time Weather API data; Created login page with PHP, MySQL for users.

Skin Cancer - Machine Learning

2023

Developed a Python-based machine learning model for skin complication analysis using computer vision and image classification techniques, achieving a 0.93 ROC AUC score in accuracy testing.

Loop Habit Tracker

2023

Utilized Kotlin to engineer a mobile app promoting habit formation and tracking long-term goals, featuring in-depth graphs, insightful statistics for progress monitoring, and a seamless, intuitive interface design

HONORS

Eagle Scout | Mabel and Lawrence S. Cooke Eagle Scout Scholarship

2021