NISHANT SAI CHALLA

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EDUCATION

University of Victoria Victoria, BC

2024 - Present

Bachelor of Science in Computer Science and Mathematics

The University of British Columbia Vancouver, BC

2021 - 2023

Bachelor of Applied Science in Engineering

SKILLS

Technologies:

Programming Languages: C, Python, Java, JavaScript (ES6+), R

• Frameworks & Libraries: React, React Native, React Router, Next.js

• Front-End: HTML5, CSS3, JSX

Back-End: Node.js, RESTful APIsDatabases: SQLite, PostgreSQL, Microsoft SQL Server

Tools & Platforms: GIT, NPM, VSC, DBeaver, Tableau, MicroSoft SQL Server Management Studio

• Data Structures & Algorithms: Linked Lists, Stacks, Queues, Trees, Graphs, Searching, Sorting, Dynamic Programming

PROJECTS

Spotify Streaming Data Analysis

- Cleaned and standardized a Kaggle-based Spotify dataset in R, ensuring consistent numeric fields and complete artist and song records.
- Created bar charts, line charts, and heatmaps using R libraries (e.g., ggplot2) to compare daily streams and reveal overlaps between top songs and artists.
- Used linear regression (with Cook's distance and residual plots) to examine how an artist's total streams predict the streams of their top song.
- Applied logistic regression to determine if a song is likely to rank in the top 10 based on daily streams, total streams, and artist popularity.
- Conducted K-means clustering to categorize artists by streaming metrics (daily streams, total streams, lead/feature/solo proportions).
- Technologies & Tools: R, Tableau.

Full Stack Project - MovieZone

- Developed a React.js application integratingOMDb and WatchMode APIs for real-time movie data, personalized recommendations, and streaming availability tailored to users.
- Created reusable components (e.g., MovieCard, Recommendations) and a responsive UI.
- Implemented React Router for seamless navigation and React Hooks (useState, useEffect) for efficient state management.
- Fetched real-time data via RESTful APIs and ensured robust error handling and loading indicators.
- Technologies & Tools: React.js, HTML, CSS, JavaScript (ES6+), React Router, Git, NPM, OMDb API, WatchMode API

COVID-19 Data Analysis & Dashboard

- Performed end-to-end analysis of global COVID-19 data (cases, deaths, vaccination rates) using T-SQL in Microsoft SQL Server, optimizing performance through window functions, CTEs, and temporary tables.
- Calculated mortality and infection rates by country and continent using data from OurWorldInData.org, enabling detailed trend analyses.

- Created an interactive Tableau dashboard with geospatial maps, bar charts, line charts, and forecast models to pinpoint hotspots and project future growth.
- Implemented parameter-driven filters, custom tooltips, and dynamic visuals to support real-time data exploration and actionable insights.
- Technologies & Data Sources: T-SQL, Microsoft SQL Server, Tableau, Excel, OurWorldInData.org.

EXPERIENCE

VikeLabs Member 02/2024 - Present

VikeLabs, Victoria, BC

VikeLabs is a collective of students who learn to build, deploy, and test software apps. We are a community of student developers, designers, and entrepreneurs who are passionate about designing software solutions for students and the UVic campus community.

SUBC Member 09/2022 - 09/2023

SUBC - UBC's Submarine Design Team, Vancouver, BC

Collaborated with UBC's Submarine Design Team (SUBC) to design, construct, and test a one-person human-powered submarine. Contributed to the team's successful participation in international competitions in the United States and England, showcasing innovative engineering solutions and teamwork.