Khushwant Singh Parmar

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https://github.com/ https://www.ksparmar.com

Technical Skills

- **Languages** : Python, C, Java, Javascript, R, SQL, HTML, CSS
- **Libraries:** scikit-learn, scipy, sklearn, Pandas, Numpy, matplotlib.pyplot, React
- **Platforms:** Windows, Linux, Git
- **Environments:** Android Studio, Visual Studio Code, Jupyter, RStudio
- **Technologies:** Microsoft SQL Server, Node.js, Balsamiq, Figma

Projects

Personal Portfolio Website **(December 2021)**

- Used React components to create a portfolio website and deployed using Netlify
- Wrapped using Tailwind CSS, added Google Maps API support, and Netlify forms
- Showcases Android, C and UI/UX projects with videos

Property Prices Analyzer **(July 2021)**

(CMPT 353, Computational Data Science)

- Used Python Data Science libraries to analyze real estate trends for City of Vancouver
- Used sklearn functions to preprocess raw data and regression models(KNN, Random Forest, Gradient Boosting) to predict property price based on location and year built
- Used sklearn classifier models (GaussianNB, KNN, Random Forest) to predict property location based on type of dwelling, price change and current price
- Used scipy.stats to perform statistical analysis on properties based on type and neighbourhood and Mann Whitney U Test to determine if different types of properties had similar price trends

LAN Chat Functionality **(November 2020 – December 2020)**

(CMPT 300, Operating Systems)

- Implemented a text chat functionality using UDP sockets in C language
- Used multithreading for handling input, sending, receiving and display of messages
- Used fixed size buffers for storing messages, Mutexes and Conditional Variables for synchronization
- Allowed users on two machines on the same network to connect using port numbers and chat

Linux Commands simulation **(November 2020 – December 2020)**

(CMPT 300, Operating Systems)

- Created a Linux Process Life-Cycle simulation using lists, priority queues and semaphores
- Allowed users to create, fork, kill, get information about and block/unblock processes using commands in Linux terminal
- Enabled inter-process communication using lists as buffers and process priorities to allow concurrent access to buffers
- Simulated the ls command in Linux including ls -i, ls -l , ls -ls, ls -R , ls -r and their combinations

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Projects Continued

Music Database **(November 2020 – December 2020)**
(CMPT 354, Database Systems 1)

- Created an SQL Server database to represent data about a fictional music company
- Ensured correct data input, updating and deletion using Triggers
- Allowed user to execute complex queries using Stored Procedures
- Created User Defined Functions for database tables to ensure data consistency

FindDaMatch **(June 2020 – August 2020)**
(CMPT 276, Introduction to Software Engineering)

- Developed a game using Java in Android Studio to mimic the card game Spot it
- Used Android Canvas to simulate cards with images and text with different number of pictures per card corresponding to different modes
- Used Android View class to implement the draw and discard pile and ViewTreeObserver to track changes on cards in the playfield
- Allowed Flickr API and Emulator local storage access to use custom images on cards

Usability Assessed Interactive Prototype **(July 2020 – August 2020)**
(CMPT 363, User Interface Design)

- Identified critical usability issues and created an interactive prototype for the Canvas mobile app
- Conducted heuristic evaluation with a team of 4 people to detect aspects of UI violating Jakob Nielsen's 10 heuristics
- Used Balsamiq to create storyboards based on design scenarios derived from usability research
- Used Figma to create prototype incorporating information from visual design essentials, Don Norman's visual design principles, and the C.R.A.P design principles

Work Experience

Cashier – Safeway, Surrey BC **(November 2018 – October 2020)**

- Cashed out purchases and operated check stand at the front end
- Attended to customer needs and guided them through the aisles employing clear communication and product knowledge
- Faced aisles according to the directions of the manager. i.e. organized, shelved the products

Education

Simon Fraser University, Burnaby, BC **(September 2018 – Present)**

- BSc Computing Science Expected Graduation: August 2023