Raunak Sarmacharya

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EDUCATION

Memorial University of Newfoundland   St. John's, NL |
BACHELOR IN COMPUTER SCIENCE WITH SPECIALIZATION IN VISUAL COMPUTING AND GAMES

WORK EXPERIENCE

Telus International | DATA ANALYST   Remote | December 2023 – Present

Conducted in-depth online research and data analytics to refine and enhance the quality of digital map content, aligning with global standards for accuracy and relevance.

Freelance | WEB DEVELOPER   Remote | November 2022 – Present

Engineered bespoke websites for a broad client base, focusing on optimizing digital engagement and strengthening online business visibility.

Crossmark | RETAIL MERCHANDISER   St. John's, NL | January 2022 – November 2022

Collaborated closely with store teams to execute merchandising strategies effectively, ensuring compliance with corporate standards and objectives.

Club Demonstration Services | PRODUCT DEMONSTRATOR   St. John's, NL | March 2019 – January 2022

Spearheaded product demonstrations that significantly boosted sales, while also elevating brand recognition and customer engagement through dynamic presentation techniques.

Student Works | PAINTING CONTRACTOR   St. John's, NL | January 2019 – March 2019

Implemented effective merchandising tasks in collaboration with store personnel, ensuring strategic alignment with sales and marketing objectives.

The Telegraph | NEWSPAPER DELIVERY PERSON   St. John's, NL | September 2018 – January 2019

Ensured accurate and timely delivery of newspapers to subscribers, maintaining a high level of reliability and customer satisfaction.

Walmart | CUSTOMER SERVICE ASSOCIATE   St. John's, NL | October 2017 – September 2018

Provided exemplary customer service, facilitating smooth transaction processes and supporting the achievement of store sales targets.

VOLUNTEERING EXPERIENCE

NL Eats | COMMUNITY HELPER   St. John's, NL | December 2020 – August 2021

Joined forces with NL Eats at Memorial University to assist in supporting community members facing food insecurity. Contributed to the collective effort of organizing food drives and distributing essentials, learning the value of teamwork and community solidarity in addressing and alleviating local needs.

Aawaz NGO | EDUCATION VOLUNTEER   Kolkata, IN | March 2016 – March 2020

Played a small but meaningful role in Aawaz NGO's mission to educate underprivileged communities in India. Collaborated with a dedicated team to craft and deliver educational programs that aimed to bridge learning gaps. Focused on creating an inclusive environment that welcomed learners of all ages, making education more accessible and nurturing potential in overlooked communities.

PROJECTS

WEBQUERY-CHATBOT ⬈   PYTHON, STREAMLIT, BEAUTIFULSOUP4, LANGCHAIN, CHROMADB

Developed an innovative chatbot that leverages LLMs with real-time web content fetching, aiming to provide current information in response to user queries. Employed Python and Streamlit for the UI, emphasizing efficient information retrieval and context understanding through vectorization.

- Implemented with BeautifulSoup4 for web scraping and LangChain for integrating LLMs.

- Leveraged ChromaDB for vectorization, enhancing the chatbot's response accuracy and relevance.

CHESS GAME ANALYSIS ⬈   NODE.JS, TYPESCRIPT

Developed a tool for in-depth analysis of chess games, overcoming the restrictions of existing online platforms.

- Provides unlimited analysis by accepting PGN input or games from Chess.com/Lichess.org accounts.

- Implemented with Node.js and TypeScript, running locally with support for CAPTCHA integration.

AUTH-FLUTTER-FIREBASE ⬈   FLUTTER, FIREBASE AUTHENTICATION

Implemented a secure Flutter-based authentication system, featuring email and password sign-in functionality integrated with Firebase Authentication.

- Designed a modern login UI and managed user authentication states with StreamBuilder.

- Focused on error handling in the login/registration processes and utilized loading indicators for async operations.

PASSWORD MANAGER ⬈   PYTHON, MARIADB, AES-256 ENCRYPTION, PBKDF2, CLI

Created a password manager emphasizing security with AES-256 encryption and PBKDF2, accessible through a CLI.

- Highlighted secure password storage and management for users.

3D CAR GAME (THREE.JS) ⬈   THREE.JS, JAVASCRIPT, GAME PHYSICS

Developed an engaging 3D car game using Three.js, focusing on real-time physics for vehicle control and gameplay interaction.

- Showcased abilities in creating immersive user experiences with interactive game mechanics.

DISCORD POLL BOT ⬈   PYTHON, DISCORD API

Designed a Discord bot to create and manage polls, enhancing server interaction and community engagement. I made this before discord released integrated polls.

- Enabled users to generate polls with real-time voting analytics, improving community participation.

TETRIS GAME (PYGAME) ⬈   PYTHON, PYGAME

Programmed a Tetris game clone in Pygame, concentrating on game logic, UI design, and gameplay mechanics.

- Focused on recreating the classic gameplay experience with modern development tools.

FREELANCE PROJECTS ⬈   HTML, CSS, JAVASCRIPT

Directed web development projects for Raajbarir Khawa (a restaurant) and Srijani (an event management company), focusing on user experience and design.

- Emphasized responsive design and intuitive navigation to enhance online presence and user interaction.

SKILLS

Languages:	C, C++, C#, Java, Dart, JavaScript, Python, HTML/CSS, PHP
Frameworks & Platforms:	Flutter, Firebase, Android, React, Node.js
Databases:	SQL, MongoDB, DynamoDB, MariaDB, ChromaDB
Tools & Others:	Git, Docker, LaTeX, Linux, Figma, Zapier