Technical Experience

Ultimate Coders

December 2022 - Present

Coding and Robotics Instructor

Scarborough, Canada

- Experienced computer science instructor with a focus on Python programming and Arduino electronics, teaching students from SK to Grade 12.
- Skilled in creating engaging lesson plans, imparting syntax and logic, and guiding hands-on Arduino projects.
- Witnessed students enhance problem-solving abilities, gain confidence, and acquire practical programming and electronics knowledge.

Delhi Metro Rail Corporation

May 2020 - July 2020

New Delhi, India

Electronics and Computing Intern

- Enhanced metro rail operations as an electronics and computing intern at DMRC, spearheading the design and implementation of electronic systems for train control, surveillance, and communication.
- Led the development of software applications crucial to metro operations, applying advanced problem-solving skills and collaborating closely with senior engineers.
- Crafted and executed complex prototypes, pivotal in troubleshooting and optimizing electronic systems.

Projects (Portfolio)

Absentees Record WebApp | HTML, CSS, JavaScript, React, RestAPI

- Developed a dynamic form component in React, implementing error handling for empty fields and radio button selection, ensuring data integrity before submission.
- Integrated Google Sheets API to securely store form data in real-time, enabling efficient tracking and management of absentee information.
- Deployed dynamic React form with error handling and Google Sheets API integration for absentee data collection at Ultimate Coders, enhancing administrative efficiency and data tracking.

Staff Management Backend app | Java Swing, JDBC utility, MySQL

- Developed a Java-based GUI application for managing staff information.
- Leveraged JDBC to establish a connection to a SQL database, ensuring seamless CRUD operations.
- Demonstrated problem-solving skills through error handling, data validation, and real-time updates, contributing to streamlined staff information management.

Games Builder | Python, Tkinter

- Designed and developed game mechanics, game board, and user interface using Tkinter, integrated game logic into GUI,
- Successfully delivered Shuffle Block and Noughts and Crosses game project, providing an easy-to-use and enjoyable gaming experience.

Smart Mask | C-programming, ESP Module Programming, Circuit Designing

- Led firmware development for a smart mask project, ensuring precise social distancing and mask-wearing detection using sensors and microcontrollers.
- Collaborated with hardware engineers, integrated firmware seamlessly, and conducted thorough testing.
- Recognized with "Best Project of the Year 2021" award at university convocation for impactful results.

Technical Skills

Languages/Database: Java, Python, Data Structures, MySQL

Web Technologies and Framework: HTML, CSS, JavaScript, React, NodeJS, Express

Version Control: GitHub

Education

Humber College, Toronto

April 2024

GPA: 91.6/100

Post Graduate Diploma in Information Technology Solutions

Coursework: Java, Python, JavaScript, React, NodeJS, Data Structure, Design Patterns

The Northcap University, Gurugram, India

July 2021

Bachelors of Technology in Electronics and Communications

GPA: 75/100 Coursework: C- Programming, Microcontroller Programming, Antenna Designing

Additional Experience

Exceptional children trainer: Certified Trainer for Autistic Children, equipped with specialized skills in designing and implementing tailored learning programs that foster cognitive and emotional development.