Misha Butt



Technical Skills

Languages

Java, JavaScript/Typescript, C#, C, C++, Python, Bash, HTML, SQL, PHP

Operating Systems

Unix, Mac OS, Ubuntu, Windows

Frameworks

React, Node.js

Education

Bachelor of Science Honours Specialization in Computer Science with a Minor in Software Engineering

Western University 2019-2024

Work Experience

IBM | Back End Developer Intern

May 2022 - August 2023 • Markham, ON

- Implemented a single page application from a legacy web application for the IBM Business Process Manager software in a scrum environment
- Modernized and updated UI for Process Admin Console web application using IBM's Carbon Design System
- Achieved a 70% reduction in startup time by resolving package vulnerabilities
- Refactored and developed modern and user-friendly frontend pages in React with Typescript, CSS, Redux from JSP
- Utilized Jira, Git and IBM Rational Team Concert to organize tasks through functional needs and manage code delivery
- Updated components and UI to ensure application adhered to accessibility standards using IBM Accessibility tester and JAWS
- Developed and debugged RESTful APIs through the OpenAPI Specification and refactored Java backend logic

Projects

Al Non-Playable Character Chat Box | Unity, C#

- Developed a revolutionary interaction system within the Unity game engine, leveraging AI and NLP technologies
- Enabled user interaction with NPC by integrating Al generated dialogue, fine-tuning pre-trained language models, and synchronizing NPC lip movements with generated speech
- Integrated text-to-speech functionality to further enhance player immersion, offering a seamless gaming experience
- Identified limitations in dialogue coherence, NPC behavior variability, and speech synthesis quality, highlighting areas for future research and improvement

Johnny's Maze Adventure Game | Unity, C#

- Crafted an immersive gaming experience from the main menu to the endgame leaderboard, set in the vast expanse of a spaceship
- Designed complex mazes requiring players to find keys and unlock doors to progress
- Implemented a thrilling timed gameplay element to increase player engagement and urgency
- Utilized JSON to develop a dynamic leaderboard, saving and displaying top scores
- Leveraged C# scripting to ensure seamless gameplay and high performance

SheHacks Hackathon Finance Website Project | Python

- Developed a website using Python focused on educating young girls about finance, tested with 25+ students
- Built an intuitive user interface using CSS and HTML to meet the needs of individuals with different financial backgrounds
- Built using the Django framework, providing an interactive interface