PIYUSH RAZDAN

Education

University of Toronto | GPA: 3.25/4

2019 - 2024

Honours Bachelor of Science in Computer Science and Geographic Information Systems

Toronto, Canada

Relevant Coursework

- Algorithm Analysis Full Stack Development
- Data StructuresSoftware Design
- Database Management
- Functional Programming
- Systems Programming Unit Testing

Experience

Software Developer Intern

May 2022 - Aug 2023

Environment and Climate Change Canada

North York, Toronto

- Implemented automation scripts using Python, Postman, and REST API in Azure to manage users, assign roles, and configure processes in DevOps projects, enhancing operational efficiency by 18%.
- Overhauled Azure **pipeline** workflows using **CI/CD**, resolved critical **bugs**, and added repository **backup** systems, causing a **12**% reduction in deployment times and improved **resource** management.
- Designed and engineered **user interfaces** for project decommissioning using **Tkinter**, streamlining the decommission process and reducing **manual** deletion time spent by **33**%.
- Managed **ticketing** using Azure's **Kanban** board, facilitating efficient task **tracking** and fostering team collaboration.

Projects

Dev-Nexus | React, Node.js, Express, GitHub Pages, VS Code

Jun 2024

- Established a responsive portfolio using **React** and **Node.js**, featuring secure API integration with **Express** and tested deployments via VS Code.
- Utilized **GitHub Pages** with deployment workflows in VS Code for real-time updates, seamless integration, and efficient project management.

Wordle Frenzy | React, jQuery, Express, Fetch API, Web Sockets, Git, VS Code

Apr 2024

- Built a fully-functional **multiplayer** arena using **React** for the front-end and **Web Sockets** for bi-directional communication.
- Integrated advanced gameplay features, including physical keyboard support, winner display, and synchronized timers for competitive play.
- Ensured persistent user identities through cookie management, resulting in a 25% increase in session duration and maintaining primary identifiers across sessions.

Play-Portal | PHP, PostgreSQL, HTML5, CSS, VS Code

Feb 2024

- Created a **web** and **mobile-friendly** minigames site using the **MVC** pattern for organized development and **hashed** passwords for secure user authentication.
- Structured a **PostgreSQL** database to handle **login/signup** and store data, including scores for Rock-Paper-Scissors, Jumping Frog Puzzle, and Guess the Number game, with detailed **user profiles** and **game stats**.

Infrastructure Lifecycle Automation | Python, REST, JSON, Terraform, Azure, VS Code

Aug 2022

- Led the development of a **cloud-driven** project setup system using **Python** and Azure's **REST API**, improving project **addition** speed and precision by **33**%, effectively creating over **15**+ projects monthly.
- Devised a **user access** management system that integrated Azure licenses with **role-based** access controls, overseeing unauthorized access incidents for over **350+** users across the organization.
- Provisioned and managed virtual machines and blob storage using Terraform, while streamlining CI/CD pipelines with YAML to achieve a 12% increase in deployment efficiency.

Three Musketeers AI-Integrated | Java, JavaFX, JUnit, GitHub Actions, Eclipse

Nov 2021

- Developed an **AI-driven** board game using **Java** and **JavaFX**, featuring a **greedy** AI agent deployed using the recursive **minimax** algorithm, and modeled in **object-oriented** principles.
- Added **3**+ creational design patterns and coordinated development with **GIT** branches, leveraging agile workflows for **iterative** progress and **continuous** integration.

Technical Skills

Languages: Assembly, C, Haskell, Java, JavaScript/TypeScript, PHP, Python, Racket, R, Shell, SQL, YAML Libraries/Frameworks: Ajax, Django, Express, Fetch, HTML/CSS, jQuery, JUnit, Node.js, NumPy, PyTest, React Cloud Services/IDEs: AWS, Azure, Google Cloud, CLion, Eclipse, IntelliJ, PyCharm, VS Code Miscellaneous: Apache, CI/CD, ESRI, Git, LaTeX, MongoDB, PostgreSQL, Postman, REST, Terraform