

Piyush Razdan

Software Engineer, Open Sourcerer

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EXPERIENCE

Environment and Climate Change Canada | Software Developer Intern May 2022 - Aug 2023

- Engineered automation scripts using Python, Postman, and REST in Azure to manage users, assign roles, and configure processes in DevOps projects, enhancing operational efficiency by 30%.
- Overhauled CI/CD pipelines and setup backup systems, reducing times by 40% and boosting resource efficiency by 25% using Terraform integration.
- Designed and implemented user interfaces for project decommissioning, improving decision-making efficiency by 20%.
- Documented scripts and managed ticketing via Kanban board through Azure DevOps Organization.

PROJECTS

DevNexus | React, Node.js, Express, GitHub Pages, VS Code

- Engineered 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.

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

- Led the development of a cloud-driven project setup system using Python and Azure's REST API, improving project deployment precision and scalability by 30%, effectively dealing with over 50+ projects monthly.
- Managed a project cleanup feature which decommissions outdated projects and reclaims over 2 terabytes of server storage annually, optimizing resource allocation.
- Devised a user access management system that integrated Azure licenses with role-based access controls, decreasing unauthorized access incidents for over 300+ users across the organization.
- Optimized virtual machines and blob storage using Terraform, while streamlining CI/CD pipelines with YAML to enhance infrastructure-as-code practices and system consistency by 40%.

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

- 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 40% increase in session duration and maintaining primary identifiers across sessions.

PlayPortal | PHP, PostgreSQL, HTML5, CSS, VS Code

- Created a mobile-responsive games 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.

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

- Developed an AI-driven board game using Java and JavaFX, featuring a greedy AI agent remodeled with the minimax algorithm, encapsulated by object-oriented principles.
- Added design patterns and coordinated development with GIT branches, leveraging agile workflows for iterative progress and continuous integration.

EDUCATION

University of Toronto | HBSc in Computer Sci. and Geographical Information Sys. 2019-2024

CGPA: 3.25/4

Courses - Algorithm Analysis, Cloud Computing, Computer Networks, Data Structures, Database Management, Functional Programming, Linear Algebra, Network Security, Software Design, Statistics, Systems Programming, Web Development

SKILLS

Programming Languages

Assembly, C, Haskell, Java, JavaScript/TypeScript, PHP, Python, Racket, R, Shell, SQL, YAML

Technologies

- Ajax, Django, Express, Fetch, HTML/CSS, JavaFX, jQuery, JUnit, Node.js, NumPy, PyTest, React
- AWS, Azure, Google Cloud, CLion, Eclipse, IntelliJ, PyCharm, VS Code
- Apache, CI/CD, ESRI, Git, LaTeX, MongoDB, PostgreSQL, Postman, REST, Terraform