PIYUSH RAZDAN

📞 (647)-818-1345 ✉ piyush.razdan@gmail.com 💼 linkedin.com/in/piyushrazdan ⌨ github.com/piyushraz

Education

University of Toronto	**September 2019 – August 2024**
Honours Bachelor of Science in Computer Science and Geographic Information Systems	*Toronto, Canada*

Relevant Coursework

- Cloud Computing
- Full Stack Development
- Data Structures
- Software Design
- Database Management
- Systems Programming
- Functional Programming
- Unit Testing

Experience

Software Developer Intern	**May 2022 – August 2023**
Environment and Climate Change Canada	*North York, Toronto*

- Led the design and implementation of DevOps management tools using **Python**, **Postman API**, and **REST APIs** in Microsoft **Azure**, achieving a **30% boost** in operational efficiency.
- Overhauled **CI/CD** pipelines and implemented automated backup systems, reducing deployment times by **40%** and boosting resource efficiency by **25%** through **Terraform** integration in Azure.
- Developed a new user **interface** for efficient project **decommissioning**, enhancing decision-making efficiency by **20%**.

Projects

NextGen Portfolio | *React, Node.js, Express, VS Code* — **June 2024 - Active**

- Engineered an **interactive** personal website using **React** for a responsive front-end, accentuating projects and professional **milestones**.
- Utilized a custom **domain** for a permanent online presence, ensuring efficient **data handling**, user authentication, and real-time feedback for a **personalized** user experience.

Wordle Arena | *React, Express, Fetch API, JavaScript, Web Sockets, jQuery, VS Code* — **April 2024**

- Built a fully-functional **multiplayer** arena using **React** for the front-end and **Web Sockets** for real-time **bi-directional** communication, enhancing user engagement.
- Integrated **advanced** gameplay features, including physical keyboard support, recent game winners display, and a synchronized **global** timer for competitive play.
- Ensured persistent user identities through **cookie** management, leading to a **40%** increase in session duration and maintained **unique identifiers** across gameplay sessions.

Azure CI/CD Backup Integration | *HCL, JSON, Python, Microsoft Azure, PyCharm* — **April 2023**

- Optimized virtual machines and storage using **Terraform**, refining infrastructure-as-code practices and enhancing system consistency by **40%**.
- Engineered **CI/CD** pipelines using **YAML** to streamline code integration and deployment, significantly improving development speed and system reliability.

Infrastructure Lifecycle Management | *Python, REST API, Microsoft Azure, VS Code* — **June 2022**

- Led the development of an **automated** project setup system using **Python** and Azure's **RESTful API**, improving project deployment precision and scalability by **30%**, effectively managing over **50+** projects monthly.
- Managed a comprehensive project cleanup feature, automating the **decommissioning** of outdated projects and reclaiming over **2 terabytes** of server storage annually, enhancing resource allocation and system performance.
- Devised a user access management system that integrated **Azure licenses** with role-based access controls, significantly decreasing **unauthorized** access incidents for over **300+** users across the organization.

Three Musketeers AI-Augmented | *Java, JUnit, JavaFX, Eclipse* — **November 2021**

- Developed an **AI-driven** board game, Three Musketeers, using **Java** and **JavaFX**, featuring a greedy AI agent implemented with the **minimax** algorithm, emphasizing **object-oriented** programming principles.
- Employed **design patterns** and coordinated development with **GIT** branches, leveraging **agile** workflows for iterative progress and continuous **integration**.

Technical Skills

Languages: Assembly, C, Haskell, HCL, HTML/CSS, Java, JavaScript, PHP, Python, Racket, Shell, TypeScript, YAML
Libraries/Frameworks: Ajax, Carto, Express, FortiWeb, JavaFX, jQuery, JUnit, Node.js, NumPy, PyTest, React
Cloud Services/IDEs: AWS, Azure, Google Cloud, CLion, Eclipse, IntelliJ, PyCharm, VS Code
Databases: MongoDB, PostgreSQL
Developer Tools: ArcGIS, ArcMap, CI/CD, Erdas, GitHub, LaTeX, Postman API, REST, Sockets, Terraform