Pareesh Madan

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TECHNICAL SKILLS

- **Languages:** Java, JavaScript, Python, C, C++
- **Technologies:** Docker, Git, GCP, SQL

WORK EXPERIENCE

Software Engineer Co-op   **May 2025 – August 2025**
CIBC   Toronto, ON
- Developed and maintained automated Python test scripts using pytest and unittest to validate core application functionality, ensuring consistent quality and expanded test coverage
- Implemented parallel execution with concurrent.futures and integrated the tests into a Jenkins CI/CD pipeline, reducing execution time by 35%, accelerating feedback cycles, and improving deployment confidence

Software Developer Intern   **May 2024 – August 2024**
Bio-imaging Research Solutions Inc.   Guelph, ON
- Developed a prototype neural network using TensorFlow for image classification to detect diseases in cow lymph nodes, trained on a dataset of over 3,500 annotated DICOM-formatted X-ray images
- Designed and implemented a Python-based image format converter program, streamlining the preprocessing of DICOM images for training the neural network

PROJECTS

Bazel Open Source Contribution ❖ github
- Introduced a retry mechanism to handle socket exceptions during repository downloads, enhancing reliability
- Implemented two unit tests to ensure the functionality and robustness of the feature

Personal Portfolio Website ❖ pmadan.com
- Utilized HTML, CSS, and JavaScript to implement responsive design principles, ensuring optimal viewing across various devices, enhancing accessibility and user engagement
- Used JavaScript to add interactive features, improving portfolio interactivity and functionality

Pathfinding Visualizer ❖ github
- Designed an intuitive user experience with features such as start and end point placement, obstacle creation, and algorithm selection, enabling users to customize and experiment with different scenarios
- Applied OOP to create modular and extensible code, allowing for easy integration of new features

Pokemon Team Builder ❖ pkmnteambuilder
- Utilized HTML, CSS, JavaScript, PokeAPI, SQL Database, and Python (Flask) to integrate dynamic features, allowing users to easily select, customize, and visualize their Pokemon teams in real-time

EDUCATION

Bachelor of Computing, Computer Science (Co-op), Business Data Analytics Minor   **September 2023 - Present**
University of Guelph   Guelph, ON
- Cumulative GPA: 90%
- Relevant Courses: OOP, Data Structures, Software System Development & Integration, Operating Systems