Gosha Dulkin

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Skills

Languages: Python, Perl, C++, Bash/Shell, SQL, HTML, CSS

Tools & Platforms: Linux, Git, Perforce, GitLab CI/CD, PowerShell, PyTest, AWS

Experience

Software Engineer

Markham, Canada

Synopsys

Dec 2023 – Present

- Architected an automated collateral release & snapshotting platform (Python, Perl, Shell) integrating with Perforce to process 100K+ design files/project with zero data loss, saving 20+ hours/project
- Owned and optimized GitLab CI/CD pipelines with compilation/lint gates, automated tests, and unified JUnit reporting, parallelizing test suite execution and improving release confidence
- Engineered a Python regression testing framework for 1,500+ tests with custom test servers, file integrity checks, and reference diffing to ensure consistent test environments
- Developed and standardized internal API libraries across languages and handled bug/enhancement Jiras to streamline tool development and support circuit design workflows

Electrical Engineer Intern

Oakville, Canada

Coordinate Industries Ltd.

Aug 2021 – Aug 2022

- Developed Python automation tools to streamline test data entry and analysis workflows, reducing manual effort and improving accuracy
- Deployed electrical test programs for wire harness assemblies, increasing lab throughput by 150%
- Authored 200+ ISO-compliant assembly and QA procedures via stakeholder interviews and technical documentation, standardizing lab processes
- Built interactive Tableau dashboards to identify production bottlenecks and optimize scheduling

Projects

Competition Rocket

www.macrocketry.ca

- Led the Flight Controls sub-team in developing a flight computer module for a model rocket
- Developed, tested, and optimized C++ scripts for sensor data collection and processing, contributing to a 2x improvement in launch success rate

Computer Vision Chessboard

Project Report

- Designed a remote chess game using physical boards with Raspberry Pi network connectivity
- Integrated OpenCV computer vision to enable real-time board state capture and precise piece movement tracking using an overhead camera system

KinoStats KinoStats

- Built a responsive Flask web application using multithreading for efficient movie data processing
- Integrated with TMDb API, offering a dashboard visualizing the users' Letterboxd film stats

Education

McMaster University – Bachelor of Engineering (B.Eng.) in Engineering Physics

Apr 2023

• Courses: Data Structures and Algorithms, Object-Oriented Programming, Embedded Programming