## ROSY BUDHATHOKI

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#### **EXPERIENCE**

## **Software Developer in Test**

#### Pason Systems Corp, Calgary, Alberta

Sep. 2025 - Present

- Developed and maintained test automation frameworks using Java with Selenium.
- Managed Jenkins CI/CD workflows, creating and maintaining seed jobs in Groovy to support nightly test pipelines.
- Debugged and resolved system-level issues, and automated/fixed machine configuration scripts to ensure seamless application deployment and operation.

# **Software Developer Intern**

# Pason Systems Corp, Calgary, Alberta

May 2024 – Aug. 2025

- Collaborated in an Agile environment, working on assigned tickets: adding error logs, fixing virtual hardware issues, automating new features/tests, fixing existing bugs, writing automated scripts to run after deployment.
- Worked on a failure detection system that combines a rule-based algorithm with a lightweight machine learning model to analyze data from test runs and predict the reasons behind test failures.

Quality Assurance Intern - Magnify Access - Toronto, ON

Feb. 2025 - Apr. 2025

**Product Launch Research Strategy Intern** – R&B Retreats – Gracefield, QC

Feb. 2024 - Apr. 2024

## **PROJECTS**

ScanSaga | Java, Firebase, Android Studio, XML, JUnit

- Developed a Firebase-integrated Android app for event management, enabling seamless check-ins via QR code scanning with real-time data validation and updates.
- Integrated features such as RSVP tracking and analytics, geolocation verification, promotional pop-ups, image upload, real-time attendance tracking, and auto profile picture generation.

# Sudoku Solver | Python, AC-3, Backtracking, Matplotlib, CSP, Heuristics

- Implemented a Python-based backtracking algorithm with AC-3 inferences for Sudoku puzzle solving.
- Evaluated algorithm performance across 95 benchmark puzzles, capturing runtime metrics and visualizing comparative results using Matplotlib to analyze heuristic efficiency.

#### **EDUCATION**

#### **Bachelor of Science - Specialization in Computing Science**

Expected - Apr. 2026

University of Alberta – Edmonton, Alberta – Dean's Honors Roll

Courses – Software Engineering, Search and Planning in AI, Advanced Machine Learning, Reinforcement Learning, File and Database Management, Data Structures and algorithms.

#### **TECHNICAL SKILLS**

- Languages: Java, Python, C, Julia, SQL, MongoDB, Groovy, XML
- Frameworks & Libraries: JUnit, Selenium, Matplotlib, Firebase SDK, Android SDK
- Tools & Platforms: Git, GitHub, Jenkins, Allure, Android Studio, MongoDB, Firebase
- Other: Test Automation, CI/CD Pipelines, UML, Agile (Scrum), REST APIs, Linux (Ubuntu), Windows