

# SADHIKA HURIA

Cell: 250-683-8732

Email: [sadhikahuria@gmail.com](mailto:sadhikahuria@gmail.com)

LinkedIn: Sadhika Huria

---

## EDUCATION

**Bachelor of Applied Science, Computing Science**  
Simon Fraser University, Burnaby, BC

Expected: May 2027

**High School Diploma**  
Sullivan Heights Secondary, Surrey, BC

June 2023

## PROJECT

### Python Calculator Project

- Developed a command-line calculator in Python, implementing basic arithmetic operations (addition, subtraction, multiplication, and division)
- Utilized Python functions and control flow to create a user-friendly interface and handle various input cases
- Implemented error handling for invalid inputs and division by zero to prevent crashes
- Enhanced the calculator by adding advanced features such as exponentiation, square roots, and percentage calculations
- Optimized the code for readability and efficiency using modular programming techniques

### The Odin Project

- Working through Full Stack web development course through HTML, CSS, JavaScript, Ruby on Rails.
- Upcoming 5 web development projects through the course.

## SOFTWARE

### Git & GitHub - <https://github.com/sadhikahuria>

- **Version Control and Collaboration:** Proficient in Git for managing version history, branching, merging, and resolving conflicts; experienced in leveraging GitHub for pull requests, code reviews, and collaborative development.
- **Workflow Implementation and Optimization:** Skilled in implementing advanced Git workflows such as feature branching, rebasing, and tagging for structured releases, as well as integrating GitHub with CI/CD pipelines for automated builds, testing, and deployment.
- **Repository Management and Documentation:** Expertise in creating and maintaining GitHub repositories, including organizing project structures, managing issues, and crafting comprehensive README files and wikis to document project goals and usage guidelines.

## C

- Developed programs for embedded systems and low-level hardware interaction, focusing on efficient memory and processor usage.
- Applied structured programming techniques, utilizing pointers, arrays, and dynamic memory allocation.
- Worked with file I/O operations, string manipulation, and data handling in C for various projects.
- Gained experience in writing performance-optimized algorithms using control structures and recursion

## Python

- Built data analysis scripts and automated tasks using Python's built-in libraries and third-party modules.

- Developed web scraping tools, APIs, and automation scripts to streamline processes and extract relevant data.
- Worked with Python to design modular, reusable, and clean code while focusing on enhancing productivity.
- Applied Python in various projects, including data visualization, machine learning, and numerical analysis.

### ***MATLAB***

- Utilized MATLAB for solving complex mathematical problems, including linear algebra, numerical methods, and optimization.
- Created detailed plots, graphs, and simulations to visualize data and analyze trends in engineering projects.
- Designed custom functions and scripts for automating repetitive tasks and improving efficiency in numerical computation.
- Applied MATLAB to signal processing and control system design in academic and project-based environments.

### ***C++***

- Implemented object-oriented programs using classes, inheritance, and polymorphism to design reusable software components.
- Utilized C++ STL (Standard Template Library) to manage complex data structures like lists, and maps.
- Developed simulation programs and mathematical models using C++ for problem-solving in computational applications.
- Worked on file handling, input/output streams, and exception handling to ensure robustness in applications.

### **Computer Skills**

- Created spreadsheets in Microsoft Excel to statistical calculations and analysis.
- Wrote technical reports in Microsoft Word with citations and captions for referencing

### **Communication Skills**

- Deliver team-based final technical presentations and reports
- Write professional emails, mechanism descriptions, and technical instructions
- Document meetings with sponsors and supervisors using agendas

## **WORK EXPERIENCE**

### **Tutor Doctor**

September 2024 - Present

Delta, BC

- Managed inventory and coordinated distribution of automotive parts
- Collaborated with team members to ensure smooth workflow and meet operational goals

## **HOBBIES AND INTERESTS**

- Hiking with friends and family
- Playing Badminton and sketching

**References Available Upon Request**