# Sabrina Bailey

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**Technical Skills:**
- Programming languages: Python, C++, C, SQL, R, HTML, CSS, MATLAB, OCamL,
- Tools: Git, Azure SQL Database, Jupyter Notebooks, Conda, Microsoft Office, Quickbooks
- OS: Windows, macOS, and Linux-Ubuntu.
- Security Education and Awareness, Data Processing, Biomedical Computing, Computer Network, Computer Vision, Technical Support and Troubleshooting, Database Management

**Soft Skills:** Team Management, Problem-Solving, Team Player, Effective Communication, Time Management, Attention to Detail, Quick Learner,

**Projects:**

Blackjack Simulator                                         Jan 2025-Present
- Python GUI to teach players how to play Perfect Blackjack, Count Cards, and proper betting raises to be an advantage player.
- Integrated GUI with card visuals in TKinter
- Merged multiple modes of gameplay into one complete program.

HoneyPot                                                    Oct 2024- Present
- Dash application implementing a basic SSH Honeypot to gain and record usernames, passwords, and IP addresses.
- Adapted SSH protocol intricacies to emulate an SSH server.
- Generated RSA keys for SSH server identification and secure communication.
- Analyzed log files to extract meaningful information from captured data

Faux-toshop                                                 November 2024
- Developed a homemade version of Photoshop using custom-created functions to Greyscale, Contrast, Ordered Dither, Rotation, Saturation, Resize, Rotate, Flip Vertically and Horizontally, and Auto-level for BMP files.
- Applied mathematical equations behind image processing and manipulation, including gamma correction, linear transformation, Bayer Matrix, and pixel-to-pixel color transformations
- Created a Python TKinter GUI to allow easy user interaction and image display, with interactive sliders for real-time color adjustments.

DishCovery                                                  June 2024
- Django application of AI and computer vision-based image recognition and natural language processing to reduce meal prepping, food waste, and time.
- Managed a team of three to work collaboratively and effectively under time pressure to meet all deadlines.
- Implemented feedback loop between user and training data.
- Developed privacy and data security notices for users, with a login system to manage user access.

CHAP, Classifying Harmful (Brain) Activity in Patients                April 2024

- A team effort to detect and classify seizures in critically ill patients using machine learning.
- Trained and optimized an XGBoost classifier for multi-class classification.
- Implemented Data Preprocessing for machine learning models to handle large datasets and feature engineering from raw data.
- Integrated a multi-step data processing and model training pipeline.
- Streamlined collaboration through Slack and encouraged technical skill development and real-world problem-solving.

Employee Information Management System                    December 2023
- Java Spring Boot Application on Render is designed to streamline and centralize employee information management.
- Handled HTTP requests and responses.
- Implemented Model-View-Controller architecture with an Object-Relational Mapping database management.
- Outlined security measures to protect sensitive employee information and ensure the application adheres to Privacy Regulations and Policies.
- Planned development based on the Agile software development method.

## Work Experience:
Starbucks, Supervisor (SSV)                          Sept 2021 - Jan 2024
Coquitlam, BC
- Organized and managed a team of up to 10 baristas, ensuring efficient operation and customer satisfaction.
- Handled cash management, including daily reconciliation and safe key responsibilities.
- Trained staff on standard procedures, best practices, and health/safety standards.
- Managed inventory and ordered supplies to maintain optimal stock levels.
- Provided exceptional customer service and resolved customer complaints quickly and effectively.

Real Estate Assistant                                Oct 2018 - Present
Las Vegas, NV, USA
- Working remotely on a contract basis for individual realtors.
- SkySlope document management
- Quickbooks data entry and management
- Marketing, market analysis, and presentation preparation
- Staging homes
- Ensuring confident and ethical boundaries in all client relationships

## Education:
Bachelor of Science, Computing Science                Sept 2021-Present
with a Concentration in Artificial Intelligence and Computer Vision
- Simon Fraser University, Burnaby BC

**Awards and Certifications:** Starbucks Partner of the Quarter, Microsoft Top 3 Design Concept, Blue Ribbon for French Pastries, Culinary trained Pastry Chef, Standard First Aid and CPR, National Lifeguard Pool, and Water Safety Instructor, Food Safety Certification,

**Hobbies and Interests:** Baking, gardening, travelling, hiking, camping, kayaking, sailing, golf, swimming, skiing, trivia, reading, and tabletop board games.