# **Colin Lawrence**

# **Full-Stack Software Engineer**

Skills

Javascript | Node.js | React | Python | Flask | PostgreSQL | MongoDB | Express | Django

Projects

### **Bestpresso Coffee** 🗷

Flask React PostgreSQL Psycopg2 JWT Framer-Motion

- Developed a full-stack e-commerce platform enabling users to browse, purchase, and rate premium coffee blends with a PostgreSQL-backed catalog.
- Implemented paginated product browsing using Psycopg2 and raw SQL queries.
- Facilitated secure user authentication and session management with JWT-protected RESTful APIs, storing user data in PostgreSQL.
- Integrated a product rating system that calculates and displays average ratings from all users across all products.
- Designed cart functionality to track user selections and update inventory dynamically, streamlining the checkout process.
- Enhanced user experience with Framer-Motion animations for smooth transitions in product displays, page navigation and navigation bar.

### **HOLD or FOLD**

Node.js Express MongoDB Chart.js Axios bcrypt node-cron

- Designed a full-stack PvP crypto betting web app enabling users to wager tokens on cryptocurrency price movements over set timeframes.
- Integrated CoinGecko API with cron jobs to fetch and store real-time crypto prices, ensuring accurate bet outcomes.
- Implemented a dynamic user dashboard with Chart is to display real time and historical data of user seleceted coins
- Engineered secure token-based wagering system with retry logic for API calls, enhancing reliability and user experience.
- Developed backend with Node.js/Express and MongoDB, implementing user authentication, session management, and bet resolution logic.

#### Resumania 🛮

JavaScript HTML CSS

- Developed an interactive, single-player web-based game where players navigate a resume through job application hazards (e.g., ATS bots, spam filters) to reach the "hired" stage across 10 levels.
- Designed a dynamic 7x100 grid game board implementing real-time hazard scrolling, player movement, and collision detection.
- Engineered game mechanics including spawn rates, hazard movement patterns, and win/lose conditions, with animations for game-over and victory states.

# **Game Development Prototypes**

GameMaker Studio 2 (GML) Unity (C#)

- Prototyped a variety of 2D and 3D game concepts in GameMaker Studio 2 and Unity.
- Collaborated via GitHub and served as repository manager in charge of pull request reviews and Kanban task management.

## GreaseBot

RuneScape RobotJS

**Technical Coordinator** 

- Developed a custom automation bot using RobotJS to simulate human behavior within RuneScape, automating gameplay and resource management across multiple accounts.
- Implemented randomized input intervals and a dynamic pathfinding system with built-in variability and error margins to avoid repetitive movements and static behaviors to reduce bot detectability, mimicking natural user behavior.
- Created an inter-account resource transfer system, coordinating in-game materials and currency in an efficient, automated pipeline.
- Collaborated via GitHub and enganged in writing clean and conflict free code to the standards provided by the team.

# Professional Experience

Reliable Corporation

02/2022 - 01/2025 North York, Canada

- Planned, designed, and implemented a custom NetSuite-based workflow to replace the company's paper system, enabling real-time tracking of orders and repairs, streamlining cross-departmental communication.
- Developed visual scripts using NetSuite's SuiteScript to customize enterprise software, enhancing data processing and user interaction for internal stakeholders.
- Conducted in-house electronic repairs and on-site servicing, consistently delivering high-quality technical support and maintaining strong customer satisfaction through efficient troubleshooting and clear, professional communication.

### Education

**Full-Stack Software Engineering Bootcamp** 

General Assembly

04/2025

**Computer Systems Technician** 

Durham College

2019 - 2022

**Bachelor of Information Technology** Carleton University (Incomplete)

2014 - 2017