Erwin Samuel Coq

978-654-8417 | coq.erwin.samuel@gmail.com | linkedin.com/in/erwin-coq-aaba722ba | github.com/SAMGETUB

Education

University of Massachusetts Lowell — Lowell, MA
B.S. in Computer Science, Concentration: Data Science — *Expected December 2027*
- GPA: 3.69
- Relevant Coursework: Data Structures, Algorithms, Calculus I–III, C Programming, OOP in C++, Discrete Structures I–II, Linear Algebra

Cornell University — August 2025
Online Certificate in Machine Learning Foundations

Technical Skills

Languages: Python, C, C++

AI & Automation: AI-Enabled Tools, Generative AI, LLMs, Claude API, Prompt Design, Workflow Automation, Automated Workflows, Machine Learning

Software Engineering: REST APIs, API Integrations, Playwright, Testing & Debugging, Troubleshooting, Git, Documentation

AI-Assisted Development: Claude Code, GitHub Copilot, Claude, ChatGPT, Gemini

Data & Tools: Pandas, NumPy, Scikit-learn, Statistical Analysis, Data Visualization, VS Code, Jupyter Notebook, Google Colab, n8n, Excel

Strengths: Problem Solving, Analytical Thinking, Communication, Collaboration, Leadership

Leadership and Professional Development

Break Through Tech AI at MIT — Boston, MA
Machine Learning & AI Applied Training — *May 2025 – April 2026*
- Selected for a competitive, year-long AI fellowship; completed modules in data preprocessing, feature selection, model development, and optimization using Python and Scikit-learn.
- Applied model evaluation techniques and explored ethical considerations in responsible AI.
- Collaborated with peers and mentors to deliver project-based solutions aligned with real-world use cases.

Let's Work for the Kid Haiti | Non-profit, Co-founder — Port-au-Prince, Haiti
Co-founder & Team Lead — *June 2020 – Present*
- Led and managed a team of 13 members to organize annual giving events, providing food and scholar kits for children at Ophelinat Enfant Jesus.
- Planned and executed two large-scale fairs supporting Haitian youth, achieving a fundraising goal of $2,000 to benefit local orphanages.
- Established partnerships with local organizations and coordinated logistics, volunteer management, and marketing to expand outreach and ensure sustainability.

Projects

SiS Course Registration Automation Bot | *Python, Playwright, n8n* — July 2026
- Built a Python/Playwright workflow automation that replaces manual seat-refreshing for high-demand courses: it logs into UMass Lowell's registration portal, polls a multi-course wishlist every 30 minutes, and auto-enrolls the moment a seat opens.
- Designed a four-outcome result system (enrolled, rejected, already-enrolled, error) so the portal's own response decides whether to retry or stop, and built an automated notification pipeline (Python → n8n → webhook → Gmail) that alerts on every outcome.
- Improved reliability by troubleshooting and fixing 10+ race-condition and selector-ambiguity issues in a live React SPA using semantic selectors and explicit wait conditions; secured credentials via environment variables and documented the project in a README on a public GitHub repo.

Canvas Homework Tracker Agent | *Python, Claude API, Google Calendar API* — In Progress
- Building an AI-enabled agent that pulls upcoming assignments from the Canvas agenda feed and prioritizes them by deadline and estimated effort.
- Designing an agent loop that uses the Claude API to draft study plans and schedule sessions into open blocks on Google Calendar.
- Planning automatic replanning when study sessions are missed, plus reminder notifications so deadlines don't slip.

Airbnb Instant Booking Predictor | *Python, Scikit-learn* — August 2025
- Streamlined data preprocessing workflows with feature engineering methods such as imputation, one-hot encoding, and variance reduction.
- Implemented key stages of the ML pipeline, including model development, hyperparameter optimization, and statistical performance evaluation.
- Optimized Logistic Regression and Decision Tree models, achieving 75.4% accuracy on test data, and communicated results through ROC curves and accuracy charts.

University Affiliation and Interests

Organizations: UML Intramural Soccer, UML Intramural Ping Pong, UML Cloud Computing, NSBE

Languages: English, French, Haitian Créole