

# Kye Brathwaite

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[My GitHub](#) • [My LinkedIn](#) • [My Webpage](#)

## SUMMARY

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Aspiring Data Scientist and adaptable Computer Science student with interests in accounting and problem-solving. Skilled in planning, executing, and completing projects efficiently, analyzing complex challenges, and developing strategic, data-driven solutions.

## EDUCATION

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### University of the West Indies, Mona Jamaica

2026

Bachelor of Science, Computer Science (Minor in Accounting), GPA 3.52

- **Relevant course work:**

Introduction to Computing I, Introduction to Computing II, Mathematics for Computing, Introduction to Object- Oriented Programming, Software Engineering, Net-Centric Computing, Discrete Mathematics for Computer Science, Object-Oriented Design and Implementation, Analysis of Algorithms, Intro to Database Management Systems, Theory of Computation, Systems Programming, Dynamic Web Development, Operating Systems, Principles of Artificial Intelligence, Principles of Economics, Introduction to Cost and Managerial Accounting, Principles of Economics II, Business Law, Financial Accounting

### Harrison College Secondary School, Barbados

2023

- **Unit 2:** Applied Mathematics UNIT 1 (Grade I), Communication Studies (Grade II), Computer Science (5<sup>th</sup> in the Region, Grade I), Physics (Grade I)
- **Unit 1:** Applied Mathematics UNIT 1 (Grade I), Caribbean Studies (Grade I), Computer Science (Grade I), Physics (Grade I)
- **CSEC:** Spanish, Principles of Accounts, Physics, Mathematics, English B, English A, IT, Physical Education and Sport, Caribbean History
- **Academic Achievements and Honors:** Barbados Government Exhibition (2023), Scholarship Received from Old Scholar for performance in STEM (2022), 5th in the Caribbean Region in CAPE Computer Science (2022), Speech Day Prize Winner (2022), Principal's Honor Roll Awardee (2020, 2021, 2022)

## PROFESSIONAL EXPERIENCE

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### Hazon Flavours, Rendezvous Barbados

June-Aug 2025

*Head Chef/ Manager*

- Led a team of 12 staff, managing day-to-day restaurant operations, ensuring smooth service.

### The Irvine Hall Printery, Irvine Hall UWI Mona

April 2024

*Printery Operator*

- Operated and maintained printing equipment, troubleshooting errors to ensure high-quality output and efficient project completion.

**Barbados Robotics Team , Waterford Barbados**  
*Advisor and Tutor*

**July 2022/2023**

- Taught and Mentored Young Team Members in preparation for international competition.

## VOLUNTEERISM, LEADERSHIP AND INVOLVEMENT

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<b>Jamaica</b>	<b>2023-2026</b>
• Sports Representative- Irvine Hall, UWI Mona	2024-2025
• Barbados Student Association of Jamaica- Irvine Hall Representative	2024-2025
• League of Extraordinary Gentlemen	2023-2025
 <b>Barbados</b>	
• Key Club International- Lieutenant Governor, Division 2	2022-2023
• Harrison College- Premier Special Envoy for Global Citizenship	2022-2023
• Barbados Robotics Team Captain FGC	2020-2023

## PROJECTS

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<b>Retail Banking: Predictive Churn Pipeline &amp; Risk Segmentation</b>	<b>Jan 2026</b>
<ul style="list-style-type: none"><li>• Developed an end-to-end ML pipeline using <b>XGBoost</b> to identify at-risk customers, achieving an <b>81% ROC-AUC</b> while utilizing <b>SMOTE</b> to handle class imbalance. Engineered <b>39 business-specific features</b>, such as Service Friction and Net Retention scores, to quantify financial exposure and digital adoption patterns. Integrated Explainable AI (<b>SHAP</b>) to identify key churn drivers discovering that single-product customers are <b>4.2x more likely</b> to leave and built a risk-tiering matrix that identified <b>\$40M+ in at-risk deposits</b> for targeted retention.</li></ul>	
<b>Banking Fraud Detection &amp; Risk Scoring System</b>	<b>Jan 2026</b>
<ul style="list-style-type: none"><li>• Built an end-to-end fraud detection and risk-scoring platform using <b>XGBoost</b> and Isolation Forest, achieving 89.3% fraud recall and 0.98 <b>ROC-AUC</b> on imbalanced transaction data. Engineered <b>25+ behavioral and velocity features</b>, applied <b>SMOTE</b> and class weighting, and optimized thresholds using precision-recall and cost-based analysis. Integrated <b>SHAP</b> explainability for case-level fraud justification and developed a risk-tiered alert dashboard with ranked investigations, operational SLAs, and executive reporting.</li></ul>	
<b>CIBC Budget Tracker (n8n Workflow)</b>	<b>Oct 2025</b>
<ul style="list-style-type: none"><li>• Built an automated n8n workflow to monitor Gmail for CIBC card transactions, parse key details (amount, merchant, date), and log them into Google Sheets with a dynamic dashboard tracking income, spending, and balances in BBD and JMD. The system features real-time email monitoring, transaction categorization, currency conversion, and automated dashboard updates.</li></ul>	
<b>Budget Expense Tracker Web App</b>	<b>May 2025</b>
<ul style="list-style-type: none"><li>• A user-friendly and responsive budget tracking application built with React.js that helps users monitor their budget and expenses. The app allows users to add, edit, and categorize budget items and expenses in real time, providing an intuitive interface with dynamic updates and clear visual feedback.</li></ul>	

### **Crack the Code Game**

**June 2025**

- Built an interactive, web-based number guessing game inspired by classics like Mastermind. Built with React.js, the game challenges players to deduce a secret code of digits using logic, memory, and optional hints.

### **Email Sender and Gmail Parser**

**June 2025**

- Developed a Python script using the Gmail API to fetch and categorize emails from a specific sender. The tool extracts email subjects and bodies, classifies them into “sent,” “received,” “spent,” or “uncategorized” categories, and displays summaries, demonstrating skills in API integration, email parsing, data processing, and Python automation.

### **Coin Flip Simulator Collection**

**June 2025**

- Coded a set of Python programs demonstrating the Law of Large Numbers through coin flip simulations. Projects include single flips, multi-flip counters, running ratio tracking, streak analysis, and Matplotlib-powered visualizations, helping users explore randomness, convergence to 50/50 ratios, and streak patterns, while reinforcing Python programming and data visualization skills.

## **SKILLS**

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**Programming languages:** Python, Java, SQL, JavaScript, R, C, Git

**Computer software/ frameworks:** Office, Excel, Database, Matplotlib, Tableau, Power BI, Ubuntu

**Languages:** English, Spanish (Basic)

## **CERTIFICATES**

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- **Kaggle Python Certificate**
- Kaggle Machine Learning Certificate
- Kaggle Advanced SQL Certificate
- Foundations of Project Management
- Project Initiation: Starting a Successful Project
- Project Planning: Putting It All Together
- Project Execution: Running the Project
- Agile Project Management
- Be There Certificate (leadership/participation)

## **HOBBIES AND INTERESTS**

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- Piano and Music Theory
- Track and Field
- Cooking
- Gym
- Agentic AI projects/ experimentation

## PERSONAL INFORMATION

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Date of Birth: 09/08/2005

## REFERENCES

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Available Upon Request