

# TIMOTHY KIPRUTO

Ithaca, NY • 6072613883 • timothykipruto007@gmail.com • [LinkedIn](#) • [GitHub](#) • [Portfolio](#)

## EDUCATION

**Cornell University** – Ithaca, NY

May 2026

**Bachelor of Science in Information Science, Bachelor of Science in Global Development**

Relevant coursework:

- Introduction to Computer Science: A Design and Development Perspective
- Object Oriented Programming and Data Structures

Honors & Awards:

- Dean's List 2022, 2023

## SKILLS & CERTIFICATIONS

### • Skills

- **Programming Languages:** Python, Java, JavaScript
- **Web Development:** HTML, CSS, Node.js, React
- **Database Management:** PostgreSQL
- **Blockchain:** Web3, DApps
- **Data Analysis:** Numpy, Pandas

### • Certifications:

- CodePath Technical Interview Prep
- Udemy Full Stack Web Development certification
- Udemy Python Pro Certification
- Udemy Data analysis and visualization with Python

## PROJECTS

### **Spreadsheet Formula Evaluator - Team Member** | Team of 2

- Developed an application to evaluate postfix formulas in spreadsheets saved in CSV format.
- Leveraged subtype polymorphism to represent expression trees containing multiple kinds of nodes.
- Processed tree data structures recursively to evaluate mathematical expressions.
- Implemented error handling using exceptions to report and respond to failed operations.
- Developed JUnit test cases for all code, using lambdas to write tests that expect exceptions.
- Utilized classes from third-party libraries to enhance functionality and performance.

### **Course Management System – Team Member** | Team of 2

- Developed a course management system for managing student enrollments, course assignments, and administrative commands by:
  - Designing and implementing an abstraction for a mutable set of students using a resizable array data structure.
  - Ensuring data integrity and robustness through defensive programming techniques and assert statements to enforce preconditions and invariants.
  - Writing and executing comprehensive unit test cases and integration tests to validate system functionality and reliability.
  - Implementing features to add new students and courses, enroll and drop students from courses, view specific course and student information, and analyze enrollments for schedule conflicts and credit overloads.

## LEADERSHIP & AFFILIATIONS

CodePath|Community Member | Remote

2024