**TIMOTHY KIPRUTO**

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**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** o **Programming Languages**: Python, Java, JavaScript o **Web Development:** HTML, CSS, Node.js, React o **Database Management:** PostgreSQL o **Blockchain:** Web3, DApps

o **Data Analysis:** Numpy, Pandas

* **Certifications**: o CodePath Technical Interview Prep o Udemy Full Stack Web Development certification o 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