Jacob D. Kochian

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github.com/jdkochian

**EDUCATION**

**Cornell University**, College of Arts and Sciences  **Expected May 2023**

Bachelor of Arts, Computer Science; Minor in Physics

Cumulative GPA: 3.765

***Relevant Coursework***: Computing using Python, Object Oriented Programming and Data Structures (Java), Discrete Structures, Linear Algebra, Honors Mechanics and Special Relativity, Data Structures and Functional Programming, Basics of Quantum Mechanics, Introduction to Machine Learning

**WORK EXPERIENCE**

**Software Engineer Intern**

* As part of a summer internship, implemented a general-purpose pdf rendering service that supports dynamic content injection
* Migrated deprecated invoice PDF generation logic in Go to a third-party content management system to eliminate tech debt and reduce codebase complexity
* Implemented a webhook in JavaScript so sales/legal teams could modify PDF templates without the need of an engineer.

**Project Manager – AI-Learners** (ai-learners.com)

* Worked with a team of students in React to develop a web platform of games for students with disabilities
* Integrated an API with Firebase to handle user data and gameplay history
* Developed analytics software for the business team using Python that displayed key metrics with regards to student understanding and website performance

**Undergraduate Teaching Assistant – Mechanics and Special Relativity**

* Lead virtual office hours and moderated virtual discussion forum for students to discuss problem sets and concerns
* Collaborated with professors and graduate students to streamline communication of complex topics (relativity, quantum tunneling) to students

**PROJECT EXPERIENCE**

**OCaml Monopoly**

* Created a terminal-based Monopoly clone fully in OCaml for a term project for a college course.
* Wrote purely functional code to handle gameplay while leveraging imperative features of OCaml to express game state
* Integrated support for custom, user-created boards in JSON format

**SPECIALIZED SKILLS**

**Programming Languages:** Python, Java, C, OCaml, Javascript, Go

**Frontend/Web Development**: React, Express, Node

**Backend:** Go, Java

**Databases**: PostgreSQL, Firebase, Firestore

**Technologies:** GitHub, VSCode, Docker, GCP, Jupyter

**Other Skills:** Problem Solving, Experimentation, Communication, Self-Management, Spanish (Fluent)