Jacob D. Kochian

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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 – WeWork
- 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.

Software Developer – 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

Procedural Islands
- Created a procedurally generated landscape using Unity and C# scripting for a computer graphics practicum
- Extended octave noise function to infinity using a chunk-like system to support an infinite world
- Used a suite of Unity features to increase immersion via particle effects, directional lighting, etc.

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