David Cheung

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Education

Northwestern University, Evanston, Illinois

Master of Science in Computer Science | Bachelor of Science in Computer Science

Cumulative GPA: **3.92/4.00**

Relevant Courses: Agile Software Development, Web Development, Software Rapid Prototyping, Game Development,

Artificial Intelligence, Computer Science Education, Machine Learning, and Deep Learning.

Experience

ClassUp, San Francisco Bay Area, California

Student Tutor

5/2023 – Present

- Provided 1-on-1 tutoring for students ranging from grade 2 to grade 12 in mathematics, physics, and computer science.
- Developed "Turbo Math," a responsive website game in React JS with Firebase Real-Time Database, helping students improve mental arithmetic and track their progress.
- Created personalized, real-time data-driven visualizations using D3 JS to help students monitor and assess their learning progress.

Hexfork, Oxford, United Kingdom

Project Leader and Game/Software Developer Intern

6/2023 - 9/2023

- Designed and developed 2D arcade games using Unity with a focus on meeting client specifications.
- Led a team of five in project management, using tools like Trello, communication channels, and standup meetings to enhance productivity.
- Produced comprehensive design documents outlining game objectives, mechanics, and aesthetics for client and developer clarity.

CS + Law Innovation Lab, Northwestern University, Evanston, Illinois

Student Developer for the Law Center for Better Housing

1/2023 - 4/2023

- Created a web application using ReactJS and MongoDB within the Help Scout platform, reducing housing inquiry response times.
- Engineered a Flask-based backend API to extract and classify housing inquiries, applying machine learning (KNN) for automated categorization.
- Improved efficiency by generating cannel responses for paralegals based on inquiry classification.

Agile Software Development, Northwestern University, Evanston, Illinois

Student Developer for Researchers at Adobe

3/2022 - 6/2022

- Developed a legal PDF parser application in ReactJS with Firebase backend support to extract critical information from legal documents.
- Implemented term matching to identify and filter relevant information, enhancing document analysis accuracy.
- Applied machine learning-based classification to automatically identify critical terms within legal documents, simplifying them into a user-friendly format for individuals less familiar with legal terminology.

Northwestern University, Evanston, Illinois

Undergraduate Teaching Assistant

4/2021 - 6/2023

- Assisted fellow students in digital circuits, data science, computer graphics, and artificial intelligence courses, offering guidance in understanding course materials, debugging, and reading documentation.
- Taught underclassmen peers the usage of modern software technologies, including Visual Studio Code and GitHub, to promote independent and effective programming.

Skills

Programming Languages: Java, JavaScript, Python, C#, and SQL **Framework, Engines, and Databases:** React, Unity, Firebase

Languages: Cantonese Chinese (fluent and native), Mandarin Chinese (conversational)