# David Cheung

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#### **EDUCATION**

Northwestern University

June 2023

Master of Science and Bachelor of Science in Computer Science

Cumulative GPA: **3.92/4.00** 

Data Science Bootcamp by edx

December 2023 – Present

#### **RELEVANT COURSES**

Agile Software Development•Web Development•Software Rapid Prototyping•Data Science•Game Development•Artificial Intelligence•Computer Science Education•Machine Learning•Deep learning

## PROFESSIONAL EXPERIENCE

ClassUp Student Tutor San Francisco, CA

May 2023 – Present

- Deliver personalized 1-on-1 tutoring sessions students spanning from grade 3 to 12 in mathematics, physics, and computer science
- Extracted and transformed data from Firebase to create real-time data-driven visualizations with D3 JS, empowering students to actively monitor and assess their learning progress for an engaging educational experience
- Developed "Turbo Math," a responsive website game in React JS with Firebase Real-Time Database which significantly boosted students' mental arithmetic speed by 25%, showcasing expertise in crafting engaging and effective educational platforms

Hexfork

Oxford, UK

Project Leader and Game/Software Developer Intern

June 2023 – September 2023

- Successfully developed captivating 2D arcade games utilizing Unity and C# programming, adhering to precise client specifications
- Designed innovative game mechanics and player interactions, strategically focusing on creating player-friendly environments
- Spearheaded a cohesive team of five individuals in project management, using tools such as Trello, establishing streamlined communication channels, and conducting regular standup meetings to optimize workflow and enhance overall productivity

#### LEADERSHIP EXPERIENCE

CS+ Law Innovation Lab

Evanston, IL

Student Developer for the Law Center for Better Housing

January 2023 - April 2023

- Created a web application using ReactJS and MongoDB, seamlessly integrated within the Help Scout platform, and reducing housing inquiry response times by 15% through generating canned responses for paralegals based on inquiry classification
- Engineered a Flask-based backend API, applying machine learning (KNN) to autonomously extract and categorize housing inquiries, showcasing development proficiency and a commitment to cutting-edge technologies in streamlining workflow processes
- Crafted a visually appealing user interface using Bootstrap, complemented by seamlessly implemented event handlers, enabling smooth transitions for users navigating between the Help Scout platform and the web application

Northwestern University

Evanston, IL

Undergraduate Teaching Assistant

April 2021 - June 2023

- Supported fellow students across digital circuits, data science, computer graphics, and artificial intelligence courses, offering assistance in understanding course materials, debugging, and reading documentation to foster a collaborative learning environment
- Mentored underclassmen peers, delivering instruction on the proficient usage of contemporary software technologies, including Visual Studio Code and GitHub, with a focus on promoting effective programming skills through hands-on guidance and examples

#### Agile Software Development

Evanston, IL

Student Developer for Researchers at Adobe

March 2022 - June 2022

- Developed a PDF parser application using ReactJS with a Firebase backend, showcasing expertise in both frontend and backend technologies to efficiently extract and simplify crucial information from complex legal documents into user-friendly terminologies
- Implemented term matching algorithms into the application, a strategic addition that significantly bolstered the accuracy of document analysis by proficiently identifying and filtering relevant information
- Scheduled weekly meetings with my team and clients to discuss and ensure up-to-date progress expectations that allow iterations and improvements on the PDF parser's functional and visual design

### **VOLUNTEERING EXPERIENCE**

#### Northwestern University

Evanston, IL

Computer Science Teaching Assistant

January 2023 - June 2023

- Facilitated the learning of fundamental Python coding concepts for 5th-grade students in Evanston District 65, overcoming resource limitations by leveraging Tunepad platform to provide an engaging introduction to computer science
- Empowered students by teaching them to utilize computer science as a means of self-expression, building a creative and inclusive approach to learning
- Facilitated data gathering in the classroom via Google Forms and distributed handouts, contributing to the improvements of upcoming computer science curricula

## SKILLS

Programming Languages/ Computer: Java•JavaScript, Python•C#•SQL•Excel•VBA

Framework, Engines, and Databases: React+Unity+ Firebase+ MongoDB

**Skills:** Cantonese (native) Mandarin (fluent) Excel (intermediate) Word (advanced)