# **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

#### **SKILLS**

Programming Languages/ Computer: Java \* Java Script \* Python \* C# \* SQL \* Excel \* VBA

Framework, Engines, and Databases: React • Unity • Firebase • Mongo DB

#### PROFESSIONAL EXPERIENCE

ClassUp Independent Software Developer and Student Tutor San Francisco, CA

May 2023 – Present

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
   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
- Deliver personalized 1-on-1 tutoring sessions students spanning from grade 3 to 12 in mathematics, physics, and computer science

# Software Developer Intern, Games

Oxford, UK

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

#### **PROJECTS**

Hexfork

## CS+ Law Innovation Lab

Evanston, IL

Contract 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

#### Agile Software Development

Evanston, IL

Contract 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

#### LEADERSHIP EXPERIENCE

#### 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

### 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