Kara Wong

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EDUCATION

Brown University, *B.S. Applied Mathematics - Biology*, *B.A. Computer Science* Providence, RI
Anticipated Graduation Date: May 2026
Relevant Courses**:** Data Engineering, Statistical Methods, Deep Learning, Artificial Intelligence, Interaction Design, Global Health, Quantitative Models of Biological Systems, Computational Cognitive Science, Linear Algebra, Data Ethics, Data Structures & Algos

Newton South High School, *High School Diploma* Newton, MA | Class of 2022
Academic Awards: AP Scholar with Distinction, Massachusetts State Seal of Biliteracy in Mandarin and English

WORK EXPERIENCE

Clinical Informatics Intern, *Boston Children's Hospital* Boston, MA | June 2025 – Present
- Fine-tunes NLP model to interpret and predict correlations between asthmatic patient visits and pneumonia risk level
- Validated efficacy of Epic AI in generating hospital courses, ultimately bolstering go-live for all BCH providers
- Liaised between clinicians, IT, and Epic to optimize patient portals, electronic documentation, and clinical decision support

Software Engineer, *Develop for Good (trubel&co)* Remote | May 2025 – August 2025
- Implemented HTML/CSS and Squarespace to support SEO, accessibility, and usability for STEM/civic education nonprofit
- Iterated designs through client feedback, personas, and user testing to foster donor engagement and consumer registration

Data Science Intern, *Growth Teams* Remote | January 2025 – March 2025
- Developed Python-based ETL pipelines for efficient and dynamic processing of key metrics
- Implemented innovative analyses and visualizations to identify product export success stories across developing countries
- Delivered data-driven insights into export ranking growth trends, informing stakeholders of high-potential export sectors

CSCI0111 Head Teaching Assistant, *Brown University Computer Science Department* Providence, RI | August 2023 – Present
- Hires and coordinates a diverse team of 13 teaching assistants to refine course materials and deliver high-quality instruction
- Conducts office hours and lab sections for over 160 students of various programming backgrounds to clarify/practice skills
- Facilitates discussions and encourages holistic perspectives of algorithmic bias and socially responsible computing

SKILLS

Technical Skills: Hadoop, Linux, Docker, GitHub, Microsoft Office Products, Google Workspace, Adobe Creative Cloud
Programming: Python (TensorFlow, PyTorch, scikit-learn, Matplotlib, Pandas, NumPy), SQL, R, MATLAB, Java, JavaScript, Ruby, TypeScript, HTML, CSS, React/React Native, Jekyll, LLMs, CNNs, variational autoencoders, data structures & algorithms
Digital Design: Adobe Photoshop, Squarespace, Figma, Canva, Wix, Weebly, iMovie, WeVideo
Language: English (native), Mandarin (limited working proficiency), Cantonese (limited working proficiency)

PROJECTS

Blink-147
- Designed attention-based CNN model to detect eye position within facial image for total-paralysis patient communication
- Improved validation accuracy of pre-existing eye-based communication system by 351.2% across a more diverse audience
- Experimented with weighted loss, weighted sampling, and data augmentation to mitigate bias from dataset imbalance

Growth Teams Sector Success Map
- Built a modular ETL pipeline from scratch using Python and Pandas, establishing and managing project repository
- Created visualizations and various analytical outputs to identify high-growth export sectors in developing countries
- Documented code workflow thoroughly to support future development of a geographic exploration feature

Brown Daily Herald Mobile App
- Develops accessible iOS front-end of award-winning university newspaper mobile application with over 1000 downloads
- Self-teaches React Native to streamline interface transitions, improve search tools, and develop customizable features
- Collaborates with design and back-end teams to integrate developments and brainstorm future mobile updates