Kara Wong

121 Walnut Hill Road, Newton, MA 02461 | Phone: (857) 381-2089 | Email: kara_wong@brown.edu

EDUCATION

Brown University, *B.S. Applied Mathematics - Biology*, *B.A. Computer Science* Providence, RI
Anticipated Graduation Date: May 2026
Relevant Courses**:** Deep Learning, Artificial Intelligence, Interaction Design, Computational Molecular Biology, Quantitative Models of Biological Systems, Inference in Genomics & Molecular Biology, Statistical Methods in R, Data Ethics, Linear Algebra

Newton South High School, *High School Diploma* Newton, MA | Class of 2022

Academic Awards:
Pastiche Pie Award (Computational Molecular Biology) - *Sorin Istrail, Brown University* January 2024
AP Scholar with Distinction - *College Board* July 2022
James A. Short Award (AP Statistics) - *Newton South High School* May 2022
Massachusetts State Seal of Biliteracy in Mandarin and English February 2022
Warren B. Manhard Award (AP Calculus BC) - *Newton South High School* May 2021

WORK EXPERIENCE

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 10 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

Web Content Assistant, *Brown University Office of BioMed Communications* Providence, RI | July 2024 – Present
- Creates and configures webpages using self-service content management systems including Drupal and WordPress
- Supports faculty to tailor personal and departmental web pages that best promote publicity and networking

SKILLS

Technical Skills: Linux, Docker, GitHub, Microsoft Office Products, Google Workspace, Adobe Creative Cloud, Drupal, WordPress
Programming: Python (TensorFlow, PyTorch, scikit-learn, Matplotlib, Pandas, NumPy), R, MATLAB, Java, JavaScript, TypeScript, HTML, CSS, React/React Native, Jekyll, LLMs, CNNs, variational autoencoders, data structures & algorithms
Digital Design: Adobe Photoshop, 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

Sure: A Health Insurance Assistant
- Constructed location-based web app to locate nearest emergency rooms and medical providers in user's insurance network
- Demystified health insurance terminology with conveniently placed tooltips and easily accessible explanation of benefits
- Filtered results based on types of healthcare, available methods of transportation, and current location

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

Partiful: Shared Ideas
- Designed new user flow for popular event-planning platform Partiful through iterative design methodology
- Engaged actively with Partiful contact for feedback to maximize both stakeholder and user satisfaction