Aileen Du

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EDUCATION

Wellesley College, Wellesley, MA   Expected May 2027
Candidate for Bachelor of Arts in Computer Science and Math | Cumulative GPA: 3.75
- Relevant Coursework: Introduction to Python, Java and Data Structures, Combinatorics & Graph Theory, Linear Algebra, Introduction to Algorithms (cross-registered at MIT), Foundations of Computer Systems (Spring), Human-Computer Interaction (Spring), Software and Data (Spring).

EXPERIENCE

Research Assistant | MIT Media Lab, Opera of the Future, Cambridge, MA   Sep 2024 - Present
- Collaborated with an interdisciplinary team of 8 researchers to design an interactive learning center for the Dallas Symphony Orchestra, leveraging technology to enhance educational experiences.
- Pioneered an emotion-visualization system using TouchDesigner that tracks and translates visitor movements into real-time color displays, increasing visitor engagement by creating personalized, immersive experiences.

Researcher | Pioneer Academics   Feb 2022 - July 2022
- Authored a 12-page research paper on using descriptive social norm messages to encourage young girls to enter STEM, mentored by Babson College Professor Krista Hill-Cummings.
- Analyzed survey data from 100+ participants through statistical t-tests and qualitative methods, revealing that 47% of women face male dominance barriers and 51% experience fear of judgment in STEM fields.

PROJECTS

AI-Powered Gesture Recognition System | MIT Media Lab   Sep 2024 - Present
- Engineered a virtual mouse system using Python and MediaPipe ML model.
- Enabled precise cursor control through gestures including click interactions, drag-and-drop, scrolling, and multi-finger commands, achieving 95% accuracy in gesture detection.

Speech Therapy Application | Babson Innovation Buildathon   Nov 2024
- Designed engaging game mechanics and user interface that increased therapy adherence and reduced stigma for young users with speech impairment.
- Developed prototype of gamified speech therapy application using Python and speech recognition APIs (Google Cloud Speech, Mozilla DeepSpeech) to provide real-time pronunciation feedback.
- Won third place and $1,000 seed funding for technical implementation and market viability.

LEADERSHIPS AND EXTRACURRICULARS

Co-Team Captain | Wellesley College Varsity Golf, Wellesley, MA   Sep 2023 - Present
- Led over 20 hours per week of training and tournament participation, leading to a national DIII women's golf 5th place ranking.

Programming Team Member | Coding Club, Wellesley, MA   Sep 2023 - Present
- Represented Wellesley in ICPC International Collegiate Programming Contest.
- Engaged in weekly problem solving sessions tackling coding challenges in a collaborative environment.

Program leader | CANGO Volunteer Teaching Program, Hebei, China   Jan 2022 - Sep 2023
- Spearheaded a team of 15 volunteer teachers to develop and implement interdisciplinary STEM and English programs through structured curriculum planning and regular performance reviews.
- Expanded program reach to 200+ students in disadvantaged communities, resulting in new partnerships with three additional schools based on successful program outcomes.

Peer Tutor | Pforzheimer Learning and Teaching Center (PLTC), Wellesley, MA   Sep 2024 - Present
- Instructed 40+ tutoring sessions per semester, providing 3+ hours of weekly support for Calculus I and II students.

SKILLS

- **Programming Languages & Tools**: Python, Java, C, Pandas, VSCode, Git, Microsoft Office Suite (Word, Excel, PowerPoint), HTML, CSS, JavaScript.