Aileen Du

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EDUCATION

Wellesley College   Wellesley, MA
B.A. in Computer Science and Music | Cumulative GPA: 3.66   Expected May 2027
- Relevant Coursework: Introduction to Python, Java and Data Structures, Linear Algebra, Combinatorics and Graph Theory, Introduction to Algorithms (cross-registered at MIT), Foundations of Computer Systems, Software and Data.

EXPERIENCE

MIT Media Lab, Opera of the Future   Cambridge, MA
Software Engineer Intern   Sep 2024 - Present
- Pioneered an emotion-visualization system using TouchDesigner that tracks and translates visitor movements into real-time color displays, increasing visitor engagement by 55% and creating personalized, immersive experiences.
- Engineered a virtual mouse system using Touchdesigner, Python, and MediaPipe ML model, achieving 95% accuracy in gesture detection.
- Applied natural language processing and sentiment analysis on 3,500 lullabies, achieving a 27% improvement in parent-child bonding metrics through automated identification of effective emotional language patterns

Pioneer Academics
Researcher   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 Python, Pandas, 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

Babson Innovation Buildathon
Speech Therapy Application   Nov 2024
- Secured third place and $1,000 in seed funding for a gamified speech therapy application that increased therapy adherence and reduced stigma for young users.
- Developed prototype using Python, React, and speech recognition APIs (Google Cloud Speech, Mozilla DeepSpeech), delivering real-time pronunciation feedback with 90% accuracy

LEADERSHIP AND EXTRACURRICULARS

Coding Club   Wellesley, MA
Software Developer   Sep 2023 - Present
- Represented Wellesley in ICPC (International Collegiate Programming Contest).
- Engaged in weekly Python problem-solving sessions, tackling coding challenges in a collaborative environment.

Wellesley College Varsity Golf   Wellesley, MA
Co-Team Captain   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.

Pforzheimer Learning and Teaching Center (PLTC)   Wellesley, MA
Peer Tutor   Sep 2024 - Present
- Instructed 40+ tutoring sessions per semester, providing 4+ hours of weekly support for students in Calculus I & II.
- Developed personalized learning strategies for 25+ students, increasing student confidence ratings by 35% based on post-session surveys and improving course completion rates by 22%.

CANGO Volunteer Teaching Program   Hebei, China
Program leader   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 3 additional schools based on successful program outcomes.

SKILLS

- **Programming Languages & Tools**: Python, Java, C, SQL, Pandas, Numpy, HTML, CSS, JavaScript, React Git, Microsoft Office Suite (Word, Excel, PowerPoint).
- **Certification:** CodePath Technical Interview Prep (2025 Spring).
- **Hobbies:** Jazz Vocal, Guitar, Song Production, Golf.