# **GEORGINA WOO**

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#### EDUCATION

#### Hunter College, CUNY Bachelor of Arts, Computer Science / Theatre, Phi Beta Kappa, Magna Cum Laude **Republic Polytechnic**

Diploma (With Merit) - Arts and Theatre Management (Technical Theatre)

## WORK EXPERIENCE

### **Research Associate**

Kanwisher Lab, Brain and Cognitive Sciences, Massachusetts Institute of Technology May 2024 - May 2025

- Developing machine learning models to analyze and extract contact-related features from deep learning models.
- Using Unity, Blender, and C# to generate a large scale dataset to train ML models in physics understanding.

- Using ML model features and f-MRI data to find correlations between neural networks and human brain function.

- TIER (Trustworthy, Intelligent, Explainable Robotics) Lab, Hunter College Jan 2024 – Mav 2025
- Developing vision-based pose estimation and F-formation analysis for social robot navigation on Duckiebots and Misty II.

Computer Vision Lab, Hunter College

 Developing AR applications for a MagicLeap headset, using Unitv3D to implement mesh building and hand tracking for real world reconstruction and interaction.

## **Programming Instructor**

Quantitative Methods Workshop, Massachusetts Institute of Technology

Designed course material, problem sets, and Kahoot guizzes, and taught 4 interactive labs (2-3 hours each) to a class of 81 students and faculty. The topics covered introductory Python programming and debugging, plotting and curve fitting, and machine learning applications to neuroscience.

## Software Engineer

Department of Computer Science, Hunter College, New York, NY

- Designing programming projects in the style of classic role-playing games to strengthen students' proficiency in implementing OOP concepts in C++, supplemented by starter code, datasets, guides, and test cases.
- Developing Python autograder scripts to grade and deliver personalized feedback on students' code for 250+ submissions.

# Teaching Assistant

Department of Computer Science, Hunter College, New York, NY

- Tutoring students in beginner to advanced Python and C++ programming, computer theory and formal languages, AI, Robotics, and Machine Learning, facilitating improved comprehension and application of abstract or theoretical concepts.

# **Technical Theatre Engineer**

Freelance, Singapore / New York, NY

- Fulfilling various roles in the entertainment industry such as Stage Manager, Lighting Designer, and Production Assistant. **PROJECTS** 

Mastermind Tournament   A Mastermind tournament framework in Python to evaluate AI agents	Fall 2024
MIT Summer Research Program   10-week research internship in the Kanwisher Lab	Summer 2024
Algorithmic Adventures   C++ projects that use data structures and algorithms to create a turn-based RPG	Fall 2023
May's Mandala   Design and fabrication with of 24 EVA foam puppets for a theatre production	Spring 2023
Monster   Design and fabrication of a Monster with EVA foam and 3D printing for a theatre production	Spring 2024
Co-Curricular	

Quantitative Methods @ MIT | Using programming and machine learning to analyze and model experimental data Jan 2024 CUNY Tech Prep | Project-based data science course Fall 2024

#### Awards, Fellowships & Certifications

AIMM:CS Fellowship   National Science Foundation	March 2025
John P. McNulty Scholarship   Hunter College	Spring 2024
Machine Learning Foundations   Break Through Tech and Cornell Tech	Aug 2023
Certificate of Achievement - Intermediate iOS Development   CodePath	Nov 2022
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SKILLS

Programming Languages and Version Control: Python, C++, Unix, C#, HTML, CSS, Javascript, Swift, SQL, MATLAB, Git Software: LaTeX, AutoCAD, SketchUp, Vectorworks, Unity3D, Blender, Adobe Photoshop/InDesign, Microsoft Office Languages: English (Native), Mandarin (Proficient)

May 2025 New York, NY May 2019 Singapore, Singapore

Jan 2025

June 2023 – May 2025

May 2023 – May 2025

Jan 2022 – May 2025

Mar 2017 – May 2025