

# Adelina Zheng

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## EDUCATION

### Brown University

B.S. Applied Mathematics / Computer Science, 4.0 GPA

Providence, RI

Expected Graduation: May 2028

Relevant Courses: Data Structures and Algorithms, Computer Systems, Object Oriented Programming, Ordinary Differential Equations, Linear Algebra, Statistical Inference, Operations Research, Multivariable Calculus

## SKILLS

**Languages/Libraries:** Java, Python, C/C++, HTML/CSS, PHP, MATLAB, Pandas, NumPy, Matplotlib, GDScript

**Developer Tools:** VSCode, IntelliJ, JUnit, Git, Docker, Godot, Excel, Tableau

**Other:** Data analytics, modeling, product design & management, business operations, market research, content creation

## TECHNICAL EXPERIENCE

### Brown University Department of Computer Science

June 2025 - Present

Teaching Assistant for Intro to Object Oriented Programming

- Lead weekly 25-student lab sections to reinforce OOP concepts, host semiweekly debugging hours to help ~20 students/session troubleshoot assignments, answer questions daily on EdStem
- Grade 10 projects/week, emphasizing good style and design; ensure timely and consistent feedback
- Use Markdown and HTML to clarify, update, and standardize weekly homework handouts and course website

### Providence Recreation Department

June 2025 - Aug 2025

Data Analytics Intern

- Created 20+ interactive data visualizations with Tableau to inform community services and resource allocation
- Analyzed enrollment and membership demographics, recommended registration changes to increase attendance rates
- Integrated event data for 50+ programs using RecDesk and EventManager API to streamline website calendar
- Developed backend solutions in PHP and MySQL to store recreation program data in a city-wide database

## PROJECTS

### Numerical Integration Approximator | Python, Matplotlib, NumPy, Pandas

- Implemented and compared accuracy of computational quadrature methods such as Simpson, Gauss, and Boole's Rule
- Developing adaptive integration algorithm to optimize efficiency and minimize error, for applications in machine learning

### Mosquito Simulator | Godot, GDScript

- Collaborated with a team of artists and programmers to design, develop, and play test an interactive simulation game
- Implemented randomized NPC movement, collision mechanics, and dynamic state management using signals and nodes
- Built custom UI elements including tutorials and start/loading/end screens to streamline player experience

### Pac-Man | Java, JavaFX

- Recreated Pacman using JavaFX, including maze generation, scoring system, pause functionality, and win/lose end screens.
- Developed pathfinding algorithm for ghosts' targeting behavior using BFS, 3 ghost modes, and staggered exit times.

## ANALYTICAL & LEADERSHIP EXPERIENCE

### Brown Collegiate Consulting Group

Sep 2025 - Present

Consultant

- Collaborate with director of GitHub Copilot to increase Copilot adoption rate among college students and entrepreneurs
- Assess student/early-stage developer needs for AI coding tools by interviewing and surveying 100+ students
- Develop and present growth strategies and informed recommendations to strengthen Copilot's position among competitors

### StuffingStuff

Apr 2020 - Present

Etsy Shop Owner

- Created & manage online business selling crochet patterns, with 10,000+ sales and \$35,000+ in revenue
- Design products, conduct A/B tests, analyze SEO trends & keywords, explore competitive pricing strategies
- Utilize Excel spreadsheets to conduct data analysis on KPIs and optimize business performance
- Accumulated 1400+ reviews with 4.9/5 average rating, earned Etsy's bestseller badge for 10 different products