

# Ethan Phan

Medford, NY | 631-576-6328 | [ethanlphan8@gmail.com](mailto:ethanlphan8@gmail.com) | [linkedin.com/in/ethanlphan](https://linkedin.com/in/ethanlphan)

## EDUCATION

### University at Buffalo, The State University of New York

Buffalo, NY

*Bachelor of Science in Computer Science*

*December 2024*

- GPA: 4.000, Honors: Pride of New York Scholarship, Dean's List

## EXPERIENCE

### Teaching Assistant

August 2022 – Present

*School of Engineering and Applied Sciences, University at Buffalo*

*Buffalo, NY*

- Instruct 500+ students on topics including Data Structures, Societal Computing, and Discrete Mathematics.
- Assist 5 professors by leading 5 hour-long weekly recitations, answering 50+ student questions weekly, and providing 5+ hours of office hours.
- Assess assignments and provide prompt quantitative and qualitative feedback.
- Provide faculty with feedback on class issues and recommendations for improvement.

### Software Engineer Intern

June 2023 – August 2023

*M&T Bank*

*Buffalo, NY*

- Orchestrated Docker integration in M&T Bank's GitLab CI/CD pipelines for smooth deployment of 200+ .NET web applications under an Agile environment.
- Pioneered the project's design, resulting in elevated application performance and sustainability across the organization's web portfolio, saving the bank \$500,000 annually.
- Developed and demonstrated expertise in Docker, YAML, Angular, C#, and .NET by crafting a resilient CI/CD pipeline and a comprehensive web application.
- Recognized and awarded for excellence in team communication and teamwork during the project.

## PROJECTS

### Pomo Pengy | *Angular, TypeScript, SCSS, Express.js, MongoDB*

- Engineered a full-stack productivity application designed to incentivize task completion and study sessions through 20+ achievements and badges.
- Utilized Angular to create a visually appealing and user-friendly front end, enhancing the user experience with 25+ reusable components, models, and services.
- Leveraged Express.js to develop a RESTful API, managing user authentication and data retrieval for seamless integration with the Angular front-end.

### Schedule Sync | *React, Tailwind CSS, PHP, SQL*

- Deployed a sophisticated business scheduling and organization web application using React, hosted on an Apache HTTP server with PHP endpoints to ensure seamless data delivery.
- Collaborated in a team of 5 to produce the project, employing Scrum practices to formulate user stories, tasks, and tests, managed on Trello.
- Conducted load testing with over 100+ concurrent users during the project's presentation to ensure performance and reliability.

### PengyRL | *Python*

- Developed a reinforcement learning framework implementing SARSA, Q-Learning, and Double Q-Learning algorithms to gain insights into environmental navigation.
- Optimized reinforcement algorithms by performing rigorous hyperparameter tuning across 10,000+ episodes and analyzing their effects to yield tailored environmental results.
- Visualized experiment results using pandas, NumPy, and Matplotlib to aid in understanding the algorithms' performance.

## TECHNICAL SKILLS

**Languages:** Python, C/C++, C#, Scala, Java, PHP, TypeScript, JavaScript, HTML/CSS

**Web Development:** Angular, React, SCSS, Tailwind CSS, Express, .NET, Flask

**Technologies:** Unix, Git, GitHub, GitLab, VSCode, Figma, MySQL, MongoDB, Docker, XAMPP, Microsoft Suite

**Project Management Tools:** Trello, Jira, Confluence