# **NICHOLAS WONG**

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#### **EDUCATION**

Northeastern University, Boston, MA

September 2022 - Present

GPA: 3.2/4.0

**Khoury College of Computer Sciences** 

**Expected: May 2026** Candidate for Bachelor of Science in Computer Science

Computer Systems, Algorithms and Data, Artificial Intelligence, Object Oriented Design, Coursework:

Fundamentals of Computer Science 1 & 2, Discrete Structures

Activities: Software Engineer at Electric Racing Club, Northeastern Division 1 Basketball Student Manager

## TECHNICAL SKILLS

Python | Java | JavaScript | HTML/CSS | TypeScript Languages: React | Node.js | Vite | Flask | Pygame | NumPy | Pandas Frameworks:

Other: Git | GitHub | Docker | SQLite

#### **EXPERIENCE**

# Northeastern Electric Racing, Boston, MA

**January 2024-Present** 

Software Developer

- Integrate and maintain a full-stack application for a nationally award-winning race car team, processing real-time car data to assist the engineering team in performance optimization
- Implement back-end services using TypeScript, Node.js, Docker, and PostgreSQL to handle data intake and storage, improving system scalability and performance
- Manage the team website's tracking project progress, deadlines, and finances for 300+ club members across 3 teams

### J.P. Morgan Virtual Experience, New York, NY

**July-August 2024** 

Software Engineer

- Established a local development environment by downloading and configuring essential files, and dependencies
- Diagnosed and resolved repository issues to ensure the web application functioned correctly
- Utilized JPMorgan Chase's open-source library, Perspective, to develop a real-time data feed graph for enhanced trader monitoring and decision

## **Elegant II Valet, LONG BEACH NY**

**Summers 2023-2024** 

Assistant Manager

- Efficiently managed parking and retrieval of over 100 vehicles per hour during high-traffic events, ensuring smooth operations and exceptional customer service
- Collaborated closely with event organizers, wedding planners, and restaurant staff to coordinate parking logistics, ensuring seamless operations and guest satisfaction

#### **PROJECTS**

## **Battleship AI Agent** | *Python, SARSA*, Q-learning

December 2024

- Engineered an AI-powered Battleship agent to strategize and execute moves based on gameplay heuristics
- Formulated Q-learning and SARSA algorithms to develop decision-making strategies, improving win rate by 45%
- Optimized agents through 60,000+ simulation episodes in controlled and randomized environments, employing metrics such as accuracy distribution and average performance to validate effectiveness

#### **Personal Portfolio Website** | React, JavaScript, HTML/CSS, Vite

**July 2024** 

- Designed a responsive personal portfolio website using React and Vite, showcasing projects and skills
- Implemented interactive UI components, enhancing user experience and engagement across various devices
- Utilized modern front-end technologies and best practices to ensure fast load times and seamless navigation
- Deployed the website using a continuous integration pipeline, ensuring 99.9% uptime and smooth updates

## **Video Management API** | Python, Flask, SQLite

**April 2024** 

- Developed a RESTful API using Flask and Flask-RESTful for managing video data stored in a SQLite database
- Adopted CRUD operations for video resources, utilizing HTTP methods to support over 500 requests
- Leveraged Flask's development server for local testing and debugging, ensuring API functionality and responsiveness

#### **INTERESTS**