

# Jack Zhang

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## EDUCATION

**Vanderbilt University**

Nashville, TN

*B.S. in Computer Science, Economics*

May 2024

GPA: 3.74/4.00

**Relevant Coursework:** Machine Learning, Artificial Intelligence, Software Engineering, Algorithms, Data Structures, Operating Systems, Database Systems, Multivariable Calculus, Linear Algebra, Probability and Statistics

## TECHNICAL SKILLS

**Programming Languages:** C++, Java, Python, JavaScript, SQL, Typescript, HTML, CSS, PHP

**Technologies:** AWS (S3, SQS, ECS, Fargate, CloudWatch), React, Django, Git, PostgreSQL, Docker, Gradle

## PROFESSIONAL EXPERIENCE

**Amazon**

New York, NY

*Software Development Engineering Intern*

May 2023 – August 2023

- Delivered a cloud-based service with over 99.9% availability and low-latency in ECS-Fargate for Supply Chain Optimization Technologies (SCOT) using Java, Typescript, and AWS tools: S3, SQS
- Streamlined direct processing of data from finance team to production, eliminating the need for SDEs to handle the data and bypassing the full-day service deployment; resulted in 7 figure monetary impact
- Automated ingestion, transformation, and storage of Excel files to enhance error-handling robustness, debugging 4 critical issues in the labor cost data flow; implemented unit tests with JUnit and Mockito

**Iron Galaxy Studios**

Nashville, TN

*Software Engineering Intern*

May 2022 – August 2022

- Converted compatibility of *Crash Bandicoot 4: It's About Time* from Battle.net's infrastructure to Steam's online subsystems utilizing C++ and UE4 with P4V for version control
- Conducted comprehensive code analysis, identifying, testing, and resolving over 120 crucial errors and bugs for both *Rumbleverse* and *Crash Bandicoot 4: It's About Time*, ensuring a smooth launch for both games
- Spearheaded communication with a team of interns to propose and develop a parkour game in UE4 and C++

**Private Tutor**

Remote

*Self-Employed*

March 2020 – Present

- Tutored over 12 students ranging from 4<sup>th</sup> to 12<sup>th</sup> grade in math, computer science, and science
- Tailored detailed lesson plans to students' needs and coordinated with parents to develop consistent schedules

## PROJECTS

**VandyPool Web App**

November 2023

- Engineered a full-stack rideshare and carpool web application for students to save money on rides
- Developed a React user interface and API endpoints with Django REST framework and PostgreSQL database
- Integrated Jest for unit testing with Docker containerization; CI/CD deployment on Heroku and Vercel

**Personal Portfolio**

October 2023

- Showcasing portfolio of experience and interests in JavaScript and HTML/CSS with Vercel deployment

**Amazon Mock Website**

December 2022

- Engineered a mock website of Amazon with a functional back-end database using PHP, CSS, and SQL

## ACTIVITIES, AWARDS & INTERESTS

**Activities:** Vanderbilt Poker Association (Co-Founder), Swim Club, Table Tennis Club, Blockchain Club

**Awards:** Dean's List, Intercollegiate Poker Association 2<sup>nd</sup> Place, NISCA All America Swimming, National AP Scholar

**Interests:** Swimming, Chess, Table Tennis, Tutoring Children, Texas Hold'em, Lifting, Trying New Cuisines