

# Phi N. Tran

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## EDUCATION

University of Houston, Houston, TX

Expected May 2028

**Bachelor of Science, Computer Science, GPA: 4.0**

**Relevant Coursework:** OOP, Computer Science and Programming, Data Structures, Comp Org.

## PROJECT EXPERIENCE

**Codexa - Coding Platform** | *Java, Spring Boot, Maven, PostgreSQL, AWS, Agile*

**May 2025 - Present**

- Developed a full-stack coding platform using Java (Spring Boot) and PostgreSQL, designing REST APIs and SQL queries to support code problem retrieval and user submissions, resulting in a 35% improvement in data access speed.
- Delivered 100% of sprint goals across 10+ Agile sprints, collaborating with a cross-functional team using Git for version control and participating in daily standups to ensure on-time feature delivery.
- Deployed the application to AWS EC2 and RDS (PostgreSQL), implementing CI/CD pipelines that maintained 99.9% service uptime throughout development and testing phases.
- Integrated backend APIs with a React frontend, managing authentication, state, and routing to provide a seamless experience for 100+ users.
- Authored 30+ automated integration tests and documented debugging procedures, increasing system reliability and reducing production bugs by 40%.

**Sonny - Video Game Design** | *Unity, C#, GitHub Actions*

**Oct 2024 - Present**

Team Project | Co-Lead

- Developed a single-player, narrative-driven indie in Unity using C# with **14 cross-functional team** members, building over **40 scripts** containing OOP to manage AI behavior, physics, and user interactions.
- Integrated **version control** using Git/GitHub, managing over 150 commits and 20+ pull requests across 6 agile sprints, including code reviews and automated CI workflows using GitHub Actions.
- Built a **modular AI system** using state machines and **NavMesh** pathfinding, supporting 6 enemy types with adaptive behavior for dynamic gameplay.

**Color Detector** | *Python, OpenCV, Pandas, NumPy, KNN ML*

**Apr 2025 - May 2025**

- Developed an interactive image processing tool using **OpenCV** that detects and displays color names and RGB values upon pixel selection, achieving **97%+ prediction accuracy** on a dataset of 865 labeled colors.
- Documented test results and edge cases with screenshots and model performance metrics.

**MedLog - Medication Tracker** | *C++*

**Feb 2025 - Apr 2025**

- Implemented object-oriented structures (OOP) and file I/O to manage persistent user and prescription data.

## WORK EXPERIENCE

Mathematics Tutor | *Grade Potential Tutoring*

**Sept 2024 - Present**

- Tutored **10+** students from high school to college level, boosting math comprehension and confidence.
- Improved test scores by **25% on average** within a few months through customized and original lesson plans.
- Conducted **100+ hours** of one-on-one sessions on subjects ranging from Algebra to Discrete Mathematics.

## SKILLS

- Programming Languages:** Python, Java, C++, C#, SQL, JavaScript, HTML/CSS, R
- Tools and Technologies:** Spring Boot, PostgreSQL, AWS, Git/GitHub, Docker, ReactJS, NodeJS, OpenCV, Unity, Maven, Pandas, NumPy, GitLab CI, VS Code
- Testing & QA:** JUnit, GitHub Actions, CI/CD pipelines, Agile/Scrum, Manual & Automated Testing, Test Strategy Documentation
- Cloud & Monitoring:** AWS EC2/RDS, Splunk, GitLab CI, AppDynamics

## LEADERSHIP

Team Manager & Team Lead | *Code Coogs*

**Aug 2024 - Present**

- Attended **10+ software development workshops** and events to build software engineering and problem-solving skills with 40+ hours of training, allowing proficiency in **Python and C++**.
- Oversaw **3+ full-stack development teams** simultaneously, coordinating project timelines, assigning tasks, and facilitating collaboration across front-end, back-end, and DevOps roles using Agile and Scrum methodologies.

## AWARDS & HONORS

- Technology Student Association "Video Game Design" 1st & 2nd Place Award Team Lead (Spring 2024)