

# Ayan Zia

908-666-5126 | [ayanzia10@gmail.com](mailto:ayanzia10@gmail.com) | [linkedin.com/in/ayan-zia](https://www.linkedin.com/in/ayan-zia) | [github.com/ayanz23](https://github.com/ayanz23) | [ayanz23.github.io](https://ayanz23.github.io)

## EDUCATION

### Rutgers University - Honors College

Bachelor of Science in Computer Science, Data Science

New Brunswick, NJ

Expected Graduation: May 2027

**GPA:** 4.0, Dean's List (All semesters)

**Coursework:** Data Structures & Algorithms, Linear Algebra, Computer Architecture, Discrete Structures

## TECHNICAL SKILLS

**Programming Languages:** Java, Swift, Python, C, HTML/CSS, JavaScript, TypeScript, RISC-V Assembly, SQL, GDScript, Kotlin

**Frameworks & Libraries:** React, Node.js, Next.js, MediaPipe, OpenCV, NumPy, Pandas, Scikit-learn, Matplotlib

**Tools & Platforms:** Git, Firebase, Supabase, Xcode, CocoaPods, Docker, Insomnia, Android Studio Code

**Certifications:** Java Foundations Certified Junior Associate (Oracle), Oracle Database Foundations Certified Junior Associate, CompTIA: ITF+ (IT Fundamentals), Microsoft Office Specialist: Associate

## PROJECTS

### Scarlet Sync | *React, TypeScript, Node.js, Next.js, Python, Supabase, PostgreSQL* (Website) November 2025

- Founded a full-stack academic planning platform for **825+ users**, solving student inefficiencies by unifying 2,500+ courses and 500+ degree programs from 4 university websites
- Designed a social scheduling system for collaborative degree planning, course exploration, and schedule sharing

### Daily Vocabulary Trainer | *Xcode, Swift* (App Store) July 2023

- Launched a native iOS vocabulary-building app with **2,200+ downloads** and a **4.9/5 App Store rating** by making learning engaging for a wide audience
- Implemented a comprehensive feature set, including gamified quizzes and flashcard systems, to drive user retention and facilitate effective learning across a curated library of over **500 words**

### Joyful Companions | *Xcode, Swift, Firebase, REST APIs, Insomnia, OpenAI API* August 2025

- Developed an educational iOS application to teach children complex values through an interactive, character-driven experience, solving the challenge of making abstract concepts accessible and engaging
- Deployed an **OpenAI-powered chatbot** via a **REST API** and built backend to manage and persist user data

### Messenger | *Xcode, Swift, CocoaPods, Firebase, Google ML Kit* (Website) - (Github) August 2024

- Constructed a real-time iOS messaging app with instant, multilingual translation for **10+ languages** using Google's ML Kit
- Used Google **Firestore** for a scalable, real-time database and Firebase Authentication for secure Google sign-in

### Fitness Trainer | *Python, MediaPipe, OpenCV, NumPy* (Website) - (Github) February 2025

- Created an **AI-powered** fitness tool to provide real-time corrective feedback on squat form by leveraging **pose landmark detection** and vectorized joint angle calculations

### Flight Delay Predictor | *Python, Jupyter Notebook, Pandas, scikit-learn, Matplotlib* (Github) May 2025

- Trained a **Random Forest Classifier** on 136,000+ flight records across U.S. airports (2013-2023) to predict high-delay periods
- Achieved **84% accuracy** on a 34,000-sample test set; compared various machine learning models

### Monkey Jump | *Godot Engine, GDScript* (Website) - (Github) June 2024

- Engineered an endless runner game, featuring a procedural obstacle generation algorithm for infinite replayability and a robust, physics-based movement and collision detection system

## EXPERIENCE

### Erickson Senior Living

Server

July 2023 – Present

New Providence, NJ

- Managed communication and time in a fast-paced environment, coordinating service for **100+ residents** nightly
- Mentored and **trained 5+ new team members**, improving team efficiency and customer satisfaction