#### **Andrew Liu**

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#### **EDUCATION**

Vanderbilt University, Nashville, TN, Expected: May 2026

Bachelor of Science in Computer Science, Concentration in Applied Mathematics. GPA: 3.65 Relevant Coursework: Program Design and Data Structures, Discrete Structures, Java Object-Oriented Programming, C++ Software Design, Algorithms, Linear Algebra, Differential Equations

#### **PROJECTS**

## ChatApp (Full Stack) - GitHub

- Created a real-time messaging web application with multiple "channels" to chat with other users
- Used: NextJS, React, HTML, TailwindCSS, Socket.io, Prisma

# Travel Guide (Front End) - GitHub - Website

- Created a website to assist in finding hotels, restaurants, and other attractions while traveling
- Fetched data from Google Maps API and Travel Advisor API
- Used: React, JSX, Vercel

## Country Guesser (Full Stack) - GitHub

- Designed a MongoDB database to store usernames and passwords
- Gathered country data and validated user input using REST countries and reverse geocoding API
- Used: MongoDB, Leaflet, Express, React, Node.js, JWT, bcryptjs

# Pomozone - Pomodoro Timer App (Full Stack, In Progress) - GitHub

- Pomodoro timer web application with customizable backgrounds and timer presets
- Implementing user authentication allowing users to personalize work intervals and track progress
- Used: MongoDB, Express, React, Node.js, JWT, bcryptjs

## **ACTIVITIES AND RESEARCH EXPERIENCE**

ChangePlusPlus, Developer: September 2024 – Present

- Developing full-stack mobile application with 10-member Scrum team using Expo and React Native
- Collaborating with School The World NPO stakeholders to roadmap project outline
- Implemented database collection for school visits using SQL and TypeScript to ensure type safety

## Vanderbilt Data Science Club, Developer: November 2023 – May 2024

- Worked with ThriftSmart, the largest thrift store in Nashville using Agile project management
- Developed an image-based price appraiser using Meta SAM and Google Lens
- Designed a web application with React to streamline inventory management

# **Biomedical Data Representation and Learning Lab, Vanderbilt University,** *Lab Member:* February 2023 - May 2023

- Assisted with manual image annotation and used image processing tools to assist in digital pathology
- Prepared data for application to public databases (NIH, DOD, etc.) for patient reports

#### **SKILLS**

**Programming**: Java · C++ · JavaScript · HTML/CSS · ReactJS · Tailwind · Python · TypeScript · SQL **Software**: VSCode · IntelliJ · CLion · Git · Google Suite · Microsoft Office · Excel · Postman **Languages**: English · Mandarin Chinese · Spanish