

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: 3.85

Relevant Coursework: Program Design and Data Structures, Discrete Structures, Java OOP, Physics I, Economic Statistics, Software Design (Now), Computer Architecture (Now), Linear Algebra (Now)

Winston Churchill High School, Potomac, MD, August 2018 – June 2022. GPA: 4.00

Coursework: Multivariable Calculus, Differential Equations, Java Programming and Data Structures, AP Computer Science A, AP Scholar with Distinction

PROJECTS

ChatApp (Full Stack) - [GitHub](#)

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

Ekreb - Word Unscramble Game (Full Stack) - [GitHub](#)

- Created a word unscramble game with hint, point, and timer features
- Fetched words, definitions, and word frequency from WordsAPI, implemented REST API
- Used: React, Vite, Express, Node.js, JSX, CSS

Travel Guide (Front End/In Progress) - [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, Hooks (state/effect), Asynchronous API (async/await), deployed on Vercel

WORK AND VOLUNTEER EXPERIENCE

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

Dr. Shaolei Teng, Howard University, *Intern: July 2021 – August 2021*

- Assisted with research in protein structure databases using AlphaFold, an AI program which performs predictions of protein structure
- Attended bioinformatics lab meetings with undergraduate & medical school students

LEADERSHIP AND OTHER EXTRACURRICULARS

Varsity Science Olympiad, Winston Churchill High School *Member: September 2019 – June 2022*

- Designed and built a ramp and vehicle with a self-braking mechanism out of wood, CDs, metal parts
- Placed 9th out of 340 teams at national tournament
- Mentored Junior Varsity team in events in Astronomy and Gravity Vehicle events

SKILLS

Programming: Java · C++ · JavaScript · HTML/CSS · ReactJS · Tailwind · Python

Software: VSCode · IntelliJ · CLion · Git · Google Suite · Excel

Languages: English · Mandarin Chinese · Spanish