vincentjiang2003@gmail.com
(917) 526-7482
Brooklyn NY 11220

VINCENT JIANG

GitHub — github.com/vjiang10
Portfolio — vjiang10.github.io
LinkedIn — linkedin.com/in/-vincent-jiang

EDUCATION

Cornell University — *Bachelor of Science in Computer Science*   Ithaca, NY | Expected: May 2025
GPA: 3.94
- Honors: Dean's List
- Relevant Coursework: Object-Oriented Programming & Data Structures, Discrete Structures, Computer System Organization and Programming, Trends in Web Development, Linear Algebra, Functional Programming, Algorithms, Machine Learning, Natural Language Processing, Systems Engineering Project

Stuyvesant High School — *High School Diploma*   New York, NY | Sep 2018 – June 2021
GPA: 96.8
- Honors: 2x American Invitational Mathematics Examination (AIME) Qualifier, High Honors in Computer Science, Mu Alpha Theta Honor Society

EXPERIENCE

Software Engineer — *Cornell Cup Robotics*   Ithaca, NY | Feb 2022 – Present
- Translate user speech inputs to text using machine learning and natural language processing as part of the CS Chatbot team for the C1C0 (an R2-D2-inspired robot) project
- Reduce user speech-to-text translation errors by 22% by implementing algorithms using Python, including Levenshtein distance, a metric for word similarity

Software Engineer Intern — *Yoomi*   Ithaca, NY | Aug 2022 – Present
- Refactor and develop code in TypeScript responsible for motion-tracking behavior, data collection, and animations on HTML5 Canvas to provide an interactive, gamified experience for in-patients in physical therapy during exercises
- Design robust test suites using Jest to ensure drawing from interpreted on-screen objects from camera (OpenCV) are accurate, efficient, and scalable to new types of animations and exercises

Tutor and Course Consultant — *Cornell University*   Ithaca, NY | Jan 2022 – Present
- Foster collaborative environments for student engagement and learning as part of the Engineering Learning Initiatives (ELI) program at Cornell Engineering
- Lead and instruct 20+ students in Object-Oriented Programming & Data Structures and Multivariable Calculus for Engineers
- Facilitate discussion classes and consultations, assist in exam and assignment grading, and promote student understanding of course materials, software tools, and programming practices

PROJECTS

Towers of Hanoi — *JavaScript, HTML/CSS, React.js, Three.js, Firebase*   July 2022 – Aug 2022
- Web application and game based on the Towers of Hanoi math puzzle
- Designed and programmed responsive user interface, dynamic component behavior, and 3D animations through React.js, react-three/fiber, use-gesture, and react-spring
- Employed OAuth 2.0 authentication and added database to store and fetch user game data using Firebase
- Implemented heuristic algorithms to optimize solution animations to different puzzle variations and constraints

Terrain Map — *Java, Swing, AWT*   June 2022 – July 2022
- 3D visualization tool for popular stochastic algorithms for fractal landscape generation that model Brownian motion, including Midpoint Displacement, Diamond Square, and Perlin Noise
- Developed GUI and implemented custom display features supported by StdDraw, a simple 2D graphics library

Choice Game — *C, ImageMagick*   Jan 2021 – Feb 2021
- A choice-based game run on the terminal that relies on user command-line inputs to narrate a picture-aided storyline
- Coordinated a three-member team in project design and coding process employing systems-level programming concepts: files, pointers, dynamic and static memory allocation, threads, and processes

SKILLS

Programming Languages: Java, C/C++, Python, JavaScript, Typescript, HTML/CSS, OCaml, Swift
Technologies and Frameworks: Git, React.js, JUnit, jQuery, Jest, Node.js, AWS, Firebase