

EDUCATION

Princeton University | *Princeton, NJ*

Expected May 2026

Concentration: B.S.E. in Computer Science

Relevant Coursework: Programming System; Algorithm and Data Structure; Introduction to Machine Learning; Reasoning for Computer Science; Multivariable Calculus; Linear Algebra; Statistics and Data Analysis; Calculus I & II

SKILLS

- **Programming:** Java (Intermediate), HTML/CSS (Intermediate), C (Novice), JavaScript (Novice), Python (Novice)
- **Graphic Design:** Photoshop (Advanced), Procreate (Advanced), Canva (Advanced), Illustrator (Novice), Figma (Novice)

TECHNICAL PROJECTS

Ignithub (*Typescript, CSS, JavaScript, HTML*) - *In Progress*

Dec 2023 - Present

- Develop a social media platform that allows high school and college students from all around the world to interact and collaborate on similar projects.
- Implemented liking, commenting, and placement feature which places students in groups based on their skills and interests.
- Gained a thorough understanding of full stack development, databases, routing, and emerging technologies such as Appwrite, Tailwind CSS, React Query, and React.js.

Personal Portfolio Website (*HTML, CSS, JavaScript*)

Aug 2023 - Present

Website: <https://denish2003.github.io/>

- Crafted a responsive, intuitive portfolio interface, aiming to amplify online visibility and enhance user engagement.
- Engineered a dynamic contact form linked to Google Sheets, streamlining user inquiries and requests to network.

Autocomplete (*Java*)

Feb 2023

- Improved user experience in text input by developing an autocomplete system that predicts user queries based on a set of terms.
- Enhanced query prediction accuracy by utilizing binary search and sorting algorithms, supporting prefix-based search and weight-based term ranking.

Touring New York (*Java*)

Nov 2022 - Dec 2022

- Enhanced NYC's accessibility for tourists by showcasing 4000+ seating locations, eliminating the need for online searches.
- Improved user map navigation by implementing legend-based filtering and click-to-display features using the Java Swing.
- Gained expertise in graphic user interface, button functionality, and data processing and parsing.

WORK EXPERIENCE

Software Developer Intern, Codology

Aug 2023 - Present

- Assist highschool students in maintaining their startups by uploading educational videos on data structures, improving websites by addressing 50+ bugs, and adding new computer science modules.
- Organized 5+ interactive community events, engaging over 100 participants in live-webinars, workshops, and hackathons.

Tutor, McGraw Learning Center - Princeton University

Sep 2023 - Present

- Selected as one of the three tutors to facilitate collaborative study hall sessions offering exam preparation and homework help, as well as tips on how to approach Princeton Math exams, helping 60+ students weekly.
- Conducted weekly individual tutoring sessions, helping students thoroughly understand lecture concepts as well as sharing my algorithmic approach and thinking process to solve certain types of problems, resulting in increased exam scores.

Undergraduate Researcher, Explore Emerging Computing - Salisbury University

May 2023 - Aug 2023

- Selected as one of the 10 students to receive a grant from the National Science Foundation to conduct research in CS/Math.
- Enhanced understanding of social network structures by utilizing topological data analysis on the "Social Circles: Facebook" dataset with over 88,000 edges.
- Identified structural patterns in social networks by developing algorithms using Python libraries, such as Matplotlib, NetworkX, Giotto-tda and Ripser, and Processing 4 software, aiding in targeted marketing and content recommendation.

EXTRACURRICULAR ACTIVITIES

Participant, AI Alignment - Princeton University

Feb 2023 - May 2023

- Explored the ethical, social, and economic implications of AI through in-depth discussions and analysis.
- Collaborated with a diverse team to examine varied perspectives on AI alignment and societal impact.

Member: Badminton Club, Entrepreneurship Club (Design Team), Art Club