

Denish Patel

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EDUCATION

Princeton University | *Princeton, NJ*

Expected May 2026

Concentration: B.S.E. in Computer Science

Relevant Coursework: Algorithm and Data Structure; Programming System; Computer Science: An Interdisciplinary Approach; Multivariable Calculus; Linear Algebra; Calculus I & II; Statistics and Data Analysis

North Bergen High School | *North Bergen, NJ*

June 2022

Awards: Presidential Award for Academic Excellence, Math League Award, Art Award, NASA Langley Student Art Contest

Scholarship: North Bergen Education Association, North Bergen Federation of Teachers

SKILLS

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

TECHNICAL PROJECTS

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.

STEM EXPERIENCE

Software Developer Intern, Codology

Aug 2023 - Present

- Maintained the website by uploading 7+ educational videos on data structures, leading to a 25% increase in user engagement.
- Optimized website, addressing 15+ bugs and adding 3 new computer science modules, boosting website visits by 15%.
- Organized 5+ interactive community events, engaging over 100 participants in live-webinars, workshops, and hackathons.

Tutor, McGraw Learning Center - Princeton University

Sep 2023 - Present

- Conducted 5+ weekly tutoring sessions, significantly improving understanding of Calculus I for numerous students.
- Facilitated collaborative study hall sessions, resulting in a substantial increase in group study attendance and comprehension for Calculus I and II, benefiting 35-40 students weekly.

Undergraduate Researcher, Explore Emerging Computing - Salisbury University

May 2023 - Aug 2023

- 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.

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.

LEADERSHIP AND SERVICE

Graphics & UI/UX Designer, Entrepreneurship Club (Design Team) - Princeton University

June 2022 - Aug 2022

- Rebranded the club's digital presence using Procreate and Figma, leading to improved website UI/UX and user engagement.
- Collaborated with web developers, ensuring design integration; handled multiple projects and mentored junior designers.

President, Computer Club - North Bergen High School

Sep 2019 - June 2022

- Spearheaded programming and robotics projects such as NB Codes, boosting software engineering skills among members.
- Coordinated guest speaker events, expanding members' insights into software development, increasing NB Codes participants.