Denish Patel

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EDUCATION

Princeton University | *Princeton, NJ 08544*   Expected May 2026
Concentration: B.S.E. in Computer Science
Current Courses: Programming System; Multivariable Calculus; Linear Algebra; Statistics and Data Analysis; Modern Solid Mechanics; Drawing I
Relevant Coursework: Computer Science: An Interdisciplinary Approach; Algorithm and Data Structure; Calculus I & II

North Bergen High School | *7417 John F. Kennedy Blvd, North Bergen, NJ 07047*   June 2022
Awards: Presidential Award for Academic Excellence, Math League Award, Art Award, NASA Langley Student Art Contest
Scholarship Reception: North Bergen Education Association, North Bergen Federation of Teachers

SKILLS

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

SELECTED TECHNICAL PROJECTS

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 framework.

Personal Portfolio Website *(HTML, CSS, JavaScript)*   Aug 2023 - Present
- 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 positioning for a surge in professional connections.

STEM EXPERIENCE

Software Developer Intern, **Codology**   Aug 2023 - Present
- Developed and launched 7+ educational videos on algorithms and 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.

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.
- Identifies 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.

Member, **AI Alignment - Princeton University**   Feb 2023 - May 2023
- Advanced knowledge on the implications of AI by exploring its ethical, social, and economic aspects through discussions and analysis.
- Contributed to the understanding of AI alignment and societal impact by examining diverse perspectives in collaboration with a varied team.

LEADERSHIP AND SERVICE

Graphics & UI/UX Designer, **Entrepreneurship Club (Design Team) - Princeton University**   June 2022 - Present
- Led the club's digital rebranding using Procreate, Photoshop, and Figma; improved website UI/UX, resulting in heightened 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, boosting software engineering skills among members.
- Coordinated guest speaker events, expanding members' insights into software development trends.