

Parth Patel

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EDUCATION

Georgia Institute of Technology, College of Engineering
Bachelor of Science in Mechanical Engineering

Atlanta, Georgia

Expected Graduation: May 2026

- Zell Miller Scholar, Lead Engineer at GT Wreck Racing, GT Quantum Computing Assoc, Fall 2025 Dean's List (**3.4 GPA**)

EXPERIENCE

Yellow Jacket Space Program

Atlanta, Georgia

Propulsion Engineer

Aug 2025 – Present

- Developed a LOX coaxial swirl injector achieving 92% c*-efficiency through iterative and hot fire testing campaigns
- Optimized 18-element flight hardware from single element prototypes by conducting thermal and discharge modeling

Summit Capital Investment Group LLC

Lawrenceville, Georgia

Owner and Real Estate Developer

Mar 2022 – Aug 2025

- Raised \$12M and exited on a public-private initiative, building LEED Certified housing for essential workers in Vail, CO
- Utilized investment platform to enter and exit Turo/Airbnb rental strategies, with an average \$150k/year net profit

Deloitte Government and Public Services

Atlanta, Georgia

Technology Strategy Summer Analyst

May 2022 – Aug 2022

- Assisted a DoD/intelligence agency in creating new SOPs for talent acquisition to streamline federal hiring initiatives
- Developed a strategic playbook and multi-phase timeline to accelerate the global scaling of a new engineering team

Siemens Healthineers

Cary, North Carolina

Research and Development Intern

Jan 2022 – April 2022

- Worked on the development of a lab diagnostics product (Siemens Attelica) for faster turnaround in immunoassay testing
- Tracked the deployment and logistics of this solution being shipped to over 70 countries utilizing Tableau and PowerBI

McKinsey & Company

Atlanta, Georgia

Knowledge Analyst (Design-to-Value Lab)

Jan 2021 – Dec 2021

- Conducted product teardowns to identify optimization opportunities with an average of 25% reduction in COGS for clients
- Generated product ideas for clients in consumer and industrial sectors by applying comparative design and benchmarking

The Home Depot

Atlanta, Georgia

Global Brand and Product Development Engineer Co-op

Jan 2020 – Dec 2020

- Worked alongside Shaw and Mohawk Ind. to develop new test methodologies for carpets and flooring that are overall 22% more time efficient during onboarding of new products, resulting in \$32 million saved in yearly testing costs
- Conducted product quality assessments and updated Flex PLM workflow to ensure compliance with SOPs and contracts

PROJECTS

Create-X at Georgia Tech

Atlanta, Georgia

Idea-to-Prototype and Capstone Design

Aug 2025 – Present

- Leading the design and integration of an autonomous counter-UAS swarm system for threat detection and kinetic intercept
- Developing a ground station using dual sensing (computer vision + doppler radar) to guide the drone swarm against threats

Georgia Tech Guggenheim School of Aerospace Engineering

Atlanta, Georgia

Wind Engineering (AE 4701)

May 2024 – Aug 2024

- Conducted design and feasibility of Colorado wind turbine farms using WT_Perf to optimize rotor and turbine performance
- Analyzed energy supply/demand, economics, and public policy to have a comprehensive overview of overall project impact

InspireNC (501c3)

Raleigh, North Carolina

Co-Founder and Director

July 2017 – Dec 2020

- Established a 9,000 square foot community STEAM workspace and peer-mentor system in the Research Triangle Park Area
- Raised over \$750,000 in organizations through grants, advocacy, and crowdfunding and increased membership from 0 to 75

Georgia Tech Lab for Ultrasonic Non-destructive Testing

Metz, France

Research Assistant to Dr. Declercq

May 2019 – Aug 2019

- Tested metal plates for ship hull defect detection using acoustic transducers to process ultrasonic waves in MATLAB
- Assisted in proposal writing for securing a \$350,000 ONR grant for defect detection in Navy warships

SKILLS

Computer Aided Design: Solidworks Suite, CATIA, Autodesk (Inventor and Fusion 360), Siemens NX, PTC Creo

Technical: MATLAB, Simulink, Python, BASIC, EES, LabVIEW, Maple, JIRA, PowerBI/PowerApps, Tableau, Flex PLM

Creative: Microsoft Office, Vicon Motion Capture, FL Studio, Final Cut Pro X, Cyberlink Suite, Adobe CC Suite, Figma

Manufacturing: CNC Mill, 3-D Printer, Laser cutter, Water Jet Cutter, Wire EDM, Saws, Drill Presses, Vertical Mill, Lathe

Languages: Gujarati (Fluent second language), Hindi (Advanced), French (Working Proficient), Spanish (Elementary)

Additional Skills: Project and Risk Management, Data and Statistical Analyzing, Human-Computer Interaction, Agile, CRM