

Vaishnavi Girish

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EDUCATION

New York University (NYU) | Electrical Engineering | New York, NY | *BS in Electrical Engineering, Minor: Finance* |

Aug. 2024 – Expected May. 2028

Coursework: Circuits and Systems, Electromagnetic Fields, Digital Logic, Engineering Design & Graphics, CAD modeling, 3D printing workflows, Arduino, Python Programming, Differential Equations, Linear Algebra, Multivariable Calculus

PROFESSIONAL EXPERIENCE

Engineering Undergraduate Teaching Assistant, *New York University*, Brooklyn, NY, Aug 2025 – Till Date

- Served as a RAD Project Mentor, Prototyping Lab Assistant, and Lab Mentor; utilized strong proficiency in CAD modeling, 3D printing, soldering, Arduino programming, and circuitry to guide students through applied engineering tasks
- Collaborated with faculty to deliver lab sessions, maintain and troubleshoot prototyping equipment, and mentor first-year students through hands-on engineering design projects that built strong foundational technical skills

Software Engineering Intern, *Client: Mears Group LLC*, Houston, TX June 2025 – August 2025

- Developed Python scripts to support an AI model detecting fusion joint leaks, supporting an 82% accuracy rate in pilot testing. Supported data preprocessing and postprocessing workflows, enabling accurate classification of defective vs. approved joints

Hack3D: Digital Manufacturing Cybersecurity Research (VIP), *New York University*, Brooklyn, NY, Jan 2025 – Till Date

- Developed cybersecurity methods for CAD/STL files and additive manufacturing systems using watermarking, encryption, ML-based anomaly detection, FEM, and MicroCT analysis

Staff Writer, *Washington Square News* Jan 2025 – Till Date

- Reported on emerging tech and global affairs, delivering research-driven content to thousands across NYU's campuses and global network. <https://nyunews.com/?s=vaishnavi+girish>

EchoLink: Assistive Communication Device for Non-Verbal Patients, *New York University*, Brooklyn, NY Jan 2025 – May 2025

- Engineered a Bluetooth-enabled communication device for non-verbal patients using Arduino, LCD Interface, and C programming
- Designed and soldered circuitry; prototyped hardware integration using CAD tools as part of an engineering design initiative

Software Engineering Intern, *Mears Group LLC*, Houston, TX June 2023

- Conducted an in-depth comparative study on three cloud computing and data management platforms: Snowflake, Azure Synapse, and Google BigQuery. Provided insights into each platform's capabilities and limitations
- Applied strategic frameworks, including SWOT analysis, Porter's Five Forces analysis, Value Chain analysis, and BCG Matrix

Engineering Research Intern, *Athena Technologies*, Fremont, CA March 2023 – June 2023

- Evaluated Manufacturing Execution systems (software solutions) that integrate engineering and manufacturing processes to optimize production and enhance operational efficiency. Explored their Industry 4.0 alignment and product robustness, providing valuable insights for medical device manufacturers seeking optimal MES solutions

Girls Talk Tech, *Conoco Phillips*, Houston, TX June 2023

- Acquired awareness in cybersecurity tools, risk assessment, business continuity, and data visualization for interpreting complex data

LEADERSHIP EXPERIENCE

Girl Scout and Highest Award Specialist August 2013 – Till Date

- Completed a Gold Award STEM initiative at Townewest Elementary and founded a Eureka Club for sustained student enrichment
- Advocating for women's leadership by delivering motivational speeches and volunteering at Girl Scout camps and events

STEMReach Global, *Founder* Jun 2023 – Till Date

- Founded a global nonprofit initiative promoting equitable STEM education in partnership with Bless Society of Rural and Urban Development, Bangalore, India

Jordan High School Swim Team, *Varsity Athlete* Aug 2020 – May 2024

- Consistent 4-year District qualifier, represented team at the 5A Texas Interscholastic Swimming (TISCA) Championships

RESEARCH AND AWARDS

- Girl Scout Gold Award:** Received acclaim from the President of the United States, for outstanding achievement
- Published "Impact of AI on Financial Markets" in the Curieux Academic Journal

SKILLS

Skills: Soldering, Circuitry & Circuit Design, 3D Printing, Arduino, Python, Java, JavaScript. AWS Cloud Computing, Power BI, Splunk

Work Eligibility: U.S. citizen, eligible to work in the U.S. with no restrictions