

Advaith P. Pillai

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LinkedIn Profile (Includes Research Abstracts and GitHub Portfolio): <https://www.linkedin.com/in/advaith-pillai-b3a532239/>

Education

Georgia Institute of Technology | Atlanta, GA
Bachelor of Science in Electrical Engineering

September 2024 – Present
Expected Graduation: May 2028

Livingston High School | Livingston, NJ
GPA: 4.61

September 2020 – June 2024

Skills

Programming: Java, Python, HTML/CSS/JS, PHP, SQL

Platforms: Windows, Android

Hardware: Arduino, breadboards

Software: Android Studio, GitHub, Altium Designer SolidWorks

Communication: Presentations (Large and Small Audiences), written articles

Languages: English (native), Spanish (intermediate - New Jersey Seal of Biliteracy)

Experience

Georgia Tech Experimental Rocketry Club | Atlanta, GA

August 2024 - Present

PCB Design and Python Simulations

Working on launching a two-stage rocket to the edge of space in Summer 2025.

- Designing RF and power electronics PCB boards using Altium Designer, rapid prototyping cycles. Verifying designs with oscilloscopes.
- Simulating rocket launches using the RocketPy module in Python

Fire Robotics (High School Team) | Livingston, NJ

July 2020 – September 2023

Build/Code Team Member

High school team that went to the State First Tech Challenge tournament 3 times.

- Brainstormed and worked in electrical systems involving DC motors, servos, and power management
- Used SolidWorks to help design the robot and 3D print certain parts.
- Programmed the autonomous and driver controlled components of the robot using Java in Android Studio

Pathway-Careers.com | Livingston, NJ

December 2021 – May 2024

Co-Founder, Web Designer, Writer, and Editor

A team of four that created a website to guide high school students in career planning; presented to the Board of Education.

- Interviewed over 40 professionals in various careers
- The website was created using HTML/CSS/JS originally, but then migrated to a customized WordPress site
- Managed the team meetings, assigned roles, and set goals to attain

Projects

Research | In New Jersey

June 2021 - Present

Focuses: Health, Solar Power, and Material Science

- Quantified the correlation between radon exposure age-adjusted lung cancer rate in Northern New Jersey under the guidance of Dr. Vineethkumar V.. Presented at high school symposium and local ISEF fair (Third Place)
- Analyzed correlation between front contact layer thickness and efficiency for polycrystalline silicon solar cells

Personal Programming Projects

June 2020 - Present

Software and Video Game Developer

- Currently working to store and share study materials with MySQL, PHP, and HTML/CSS/JS (AJAX).
- Created LAN-based games using Java, HTML/CSS/JS, and Processing library; posted on GitHub
- Engineered an Arduino servo system to build a parachute deployment mechanism for a model rocket

Leadership or Activities

Boy Scouts of America - Troop 12 | Eagle Scout and Patrol Leader

September 2017 – June 2024

- Eagle Scout Project: Organized a food drive to send 700 pounds of food to the Community FoodBank of NJ
- Guided a group of 8 Scouts to advance to the next ranks and learn valuable leadership and teamwork skills