

Pratheek Thummalapalli

(804) 426-6004 | pratheekt@vt.edu

Permanent Address:

Greater Atlanta Area, Georgia

Find my CV online on git at

[pratheekt72](#)

OBJECTIVE	Seeking Internship Opportunities (Software Engineering)
EDUCATION	BACHELOR OF ENGINEERING, COMPUTER SCIENCE , May 2026 Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA
COURSE WORK	Data Structures, Problem Solving in Computer Science, Computer Organization (High School : Java, Python, Foundations of Eng., Calculus 2, Linear Algebra)
CERTIFICATIONS	AWS Certified Cloud Practitioner (Link)
SKILLS	Java, JavaScript, Python, C, C++, SQL, HTML, CSS, MD, Git, Flask, Git, Linux, Pandas, TensorFlow, Figma, Junit, Eclipse, UML, draw.io, MATLAB, SOLIDWORKS, Arduino, Machine Learning, Shell scripts, Jenkins, AWS, and MS Office (PPT, Word, Excel)

Projects

[VT Hackathon](#) – Fall 2024

Challenge:

- Develop a system to analyze historical weather patterns and real-time data.
- Predict potential weather events using factors like humidity and temperature fluctuations.
- Provide users with an intuitive UI to monitor weather conditions in select areas.

Solution:

- Created a Weather Watch Web App using the [Open-Mateo API](#).
- Tracks weather in select areas and analyzes the past two weeks of weather data.
- Utilized Python Libraries such as Pandas, NumPy, and TensorFlow
- Features a flexible and user-friendly UI.

Follow-up Research:

- Designing a solution to collect future forecast data from multiple sources.
- Maintains predictability scores for various popular weather sources based on historical accuracy.
- Continuously improving the accuracy of the Machine Learning model
- [Project Source](#).

[Data Structures](#) – Hanoi Solver Fall 2024

- **Design:** Built with the MVC pattern; front-end as an Observer for low coupling. Used UML.
- **Implementation:** Used recursion, stack operations, and validation for disk placement.
- **Development:** Implemented J-Unit tests for assurance and engineered for performance.

[Data Structures](#) – Puzzle Window Fall 2024

- Created a Java game using VT libraries with custom SimpleArrayBag and SimpleLinkedBag.
- Designed algorithms for shape management and event-driven game logic.
- Validated functionality with unit tests, including Testable Random.

[VT GOBBLE ROCKETS](#) – Spring 2024 (Innovation Lab Project)

- Co-designed a high-powered electric rocket prototype powered by a PCB.
- Assembled the rocket using motors, a Nomex parachute protector, and a tubular shock cord.