

# Sathvik Andhavarapu

sandhav1@terpmail.umd.edu • 410-660-5551 • <https://www.linkedin.com/in/sathvik-andhavarapu>

## Education

University of Maryland, College Park, Maryland

GPA: 4.00

Bachelor of Science

Expected May 2027

### Double Degree: Computer Science + Economics

- **Full Banneker/Key Scholar:** Most prestigious merit scholarship offered to just over 0.25% of applicants
- **Advanced Cybersecurity Experience for Students (ACES):** Most prestigious STEM Living-Learning Program for incoming freshman at the University of Maryland - College Park
- **Coursework:** Object-Oriented Programming I & II, Foundations in Cybersecurity I, Linear Algebra, Applied Probability and Statistics I & II, Introduction to Computer Systems, Discrete Structures

## Extracurricular Activities

### U.S. News - Full-Stack Software Engineer

Aug. 2024 - Present

*Collaboration with App Development Club, 5% of applicants were accepted*

- Developing a user-friendly data visualization tool by leveraging the U.S. News' internal API and React.js
- Developing backend features, using Flask, for data validation and QA functionality, and implementing heuristics to flag data anomalies for review

### Amazon Project Kuiper - Software Engineer

Jan. 2024 - May 2024

*Collaboration with App Development Club, 10% of applicants were accepted*

- Developed a distributed ledger-based game theory application to analyze interactions between spacecraft operators and independent space situational awareness sensor networks during high-risk conjunction events
- Performed cost analyses to evaluate operator decisions during conjunction events, and provided recommendations to operators that optimized their decision making process based on game theory strategies

### App Development Club Bootcamp

Sep. 2023 - Dec. 2023

*15% of applicants were accepted*

- Learned/implemented HTML, CSS, JavaScript, React, Django, and PostgreSQL in personal portfolio website
- Participated in workshops focused on artificial intelligence, machine learning, and web security hosted by sponsor companies such as Amazon and General Dynamics

## Projects

### Cybersecurity Honeypot Project

- Developed a honeypot system in order to study how different types of customized SSH banners influence the duration an attacker stays connected and the types of commands executed within an SSH session
- Utilized bash scripts to automate container deployment, configured NAT and firewall rules, and integrated Man-in-the-Middle in order to log attacker commands and calculate the duration of their stay

### Fantasy Football Platform Web Application

- Developing a custom full stack web application using React and Spring Boot for a fantasy football platform
- Designing and managing a PostgreSQL database, in order to create and maintain relationships between potentially hundreds of users and other entities, such as leagues, teams, and players
- Implemented JSON Web Tokens in order to create a secure user base, as well as secure API endpoints
- Created Python scripts using BeautifulSoup and Pandas for web scraping NFL player data

## Skills

**Technologies:** Java, Unix/Linux, Git, Github, Python, HTML, CSS, JavaScript, TypeScript, C Programming, React, Django, Flask, Spring Boot, PostgreSQL, MATLAB, Bash, FastAPI, Next.js, Excel, R Programming