# **Ethan Montgomery Thomas**

Columbia University Computer Science student with research experience, graduating in October of 2024. Summary Extensive experience with Linux, Python development, shell scripting, and React web development. **Profiles** in ethanmt () ethmth Education Graduated October 16, 2024 **Columbia University** Bachelor of Science (B.S.) Degree in Computer Science 4.157 GPA Experience Florida Atlantic University Institute for Sensing & Embedded Network Systems June 2023 - Aug 2023 NSF REU Engineering Research Intern Boca Raton, FL fau.edu/isense/reu/reu-2023/reu-2023-artificial-intellience-for-smart-cities Awarded "Most Outstanding Presentation" for E-Scooter Mobility Sensing Research Project. Developed a Raspberry-Pi data collection system for electric scooters with IMU, GPS, and Speed sensing. Utilized machine learning to classify and predict road riding surface types based on collected data. **Puberry** Feb 2023 - June 2023 Software Engineering Intern New York, NY puberry.org Developed a front-end application using the cross-platform Flutter framework. Worked with Google Firebase storage and auth for data retrieval and storage. Skills

# **Programming Languages**

Python, C, C++, SQL, Javascript, Typescript, Java, OCaml

# **Technical Skills**

Git, Linux, Docker, Bash, LaTeX, HTML, CSS, Raspberry Pi, Virtual Machines

### Libraries & Frameworks

React, NextJS, Flutter, PyTorch, Tensorflow, Selenium, Flask, Godot

#### **Projects** ADI DevFest Hackathon Website

Sep 2022 - Feb 2024

# https://2024.devfestcu.com/

Led DevFest 2024 website development (2024.devfestcu.com) using React, NextJS, and Javascript. Contributed to the 2023 DevFest website (2023.devfestcu.com).

### OpenAir-VPN

https://github.com/ethmth/openair-vpn

Created a custom Linux VPN front-end for AirVPN provided configuration files, supporting OpenVPN, Wireguard, and a killswitch. Relies on Linux, Bash, and iptables firewall rules.

### Auto-YouTuber

https://github.com/ethmth/auto-youtuber

Created a tool that creates daily YouTube videos by scraping top posts from Reddit, compiling them into a fulllength video, and uploading to YouTube autonomously. Uses Bash, Python, FFmpeg, and Docker.