

## What I do

I'm Rahat and I love engineering. I have 4+ years of programming and hardware engineering experience. My specific interests include machine learning, web design, cloud computing, app development, UI/UX design, product design, 3D printing, and embedded systems. These passions have led me to pursue a career in which I can continue to service people via creative work that intersects technology and design.

## Where I've worked

### Educational Software Research at UVA (Sep 2018 - Present)

- Full stack development for tool to allow instructors to monitor engagement of students within the classroom (captured via in-class cameras and microphones).
- Designed UI/UX mockups in Adobe XD and Figma and translated to front-end using HTML, CSS, and JavaScript.

### Drone Research at UVA (Jan 2017 - Present)

- Developed Python application to obtain and analyze satellite imagery. Currently being used to track seasonal variation in the vegetation of a UVA-owned forest.
- Programmed UAV flight paths and computer vision algorithms for full autonomy and tree canopy study using DJI Drone SDKs.

Check it out: [ecors.evsc.virginia.edu/research](https://ecors.evsc.virginia.edu/research)

### UVA Hyperloop and Maglev Team (Aug 2016 - Jan 2017)

- Wrote efficient data-logging and sensor-interfacing software, presented work and preliminary findings to SpaceX

Check it out: [bit.ly/uva-hyperloop](https://bit.ly/uva-hyperloop)

## What I know

### Languages

Python, C++, Java, SQL

HTML, CSS, JavaScript

### Tools

Git

Xcode, Visual Studio

Electron, React, Node.js

AutoCAD, Adobe CC Suite, Microsoft Office

## Where I study



School of Engineering and Applied Science

BS in Computer Science

Minor in Environmental Science

May 2020 Graduation

## What I'm working on

A calculator with WolframAlpha integration. A hat that intelligently takes the best photos for you. A gesture-based home control assistant. A self-charging, self-flying drone that maps forests. And a self-destructing payphone that lets you order pizza.

so much more at [rahatm.com](https://rahatm.com)