

Concept

My original idea was to design a door that consumers would use in the future. Cameras are so inexpensive now that it's not infeasible that all doors will soon have cameras in them, possibly replacing the current peephole. I imagined such a camera would connect with the consumer's home network, allowing for a live display on an screen that's connected to the network, or phone, to see who's at the door. A button could then be pressed to open the door. The camera could also be set to record pictures or video when it sees motion, keeping the information so that you know who has been at your front door throughout the day.



Example Peephole camera

Who's at my Door?

Trevor Head

Monitoring your doors remotely



Example interface for viewing recent activity at your door

Implementation

Right now, the phone receives a live stream of the front door camera, and the user is able to view the day's activities on their home monitor. Whenever excessive periods of motion are detected, and email alert is sent to the user's phone. If someone is spending too much time on your porchstep, the email will update you so you can check the live feed.



Future Work

The eventual goal would be to have a door capable of secure remote unlocking, both from a phone and any networked device. The door would also benefit from facial recognition software that allowed for keyless entry for recognized faces. A display screen near the door, upon entrance, would show who has come home, who had been at the door, and other activity for the day, from the front door camera and any other external camera monitors. All of these things are available now as separate products, it's only a matter of time before it becomes cheap enough for a mass-produced consumer product.



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