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Project Proposal

Problem

Talking to someone for the first time in a public setting can be very intimidating, particularly because it's easier to start a conversation on some common ground, like a shared interest. Figuring out what she is interested in is difficult for many people, particularly if one is afraid of saying something that offends her or fears starting a conversation on a topic she isn't interested in. If there existed a way to know a little bit about her before breaking the ice, first time conversations would be much more meaningful, aiding the development of relationships between people.

Analysis of Problem

When an acquaintance introduces you to someone new, there is immediately something you can both talk about, namely the person who introduced you to each other. From there you can get to know each other a little better and have a meaningful conversation. Conversely, when you sit next to someone on the bus it is usually a quiet ride unless you know each other already. But what if that person took Operating Systems with Lazowska two quarters ago and you could talk about what an amazing lecturer he is? Or maybe you have a common interest or share a friend? All this information is available on social networking websites such as Facebook, but you have no way of knowing this about the stranger sitting next to you on the bus or any other social setting. Even if you have a smartphone with Facebook integration, finding information about strangers is extraordinarily difficult if you don't know their name.

Privacy is something many people treasure; I may not want everyone to know that I took Introduction to Public Speaking last quarter or that I like Dan Brown novels. I may not even want anyone at all to be able to find information about me unless I explicitly say that individual can.

Further, there are some settings where you might be looking for a person who is meets certain criteria, specifically if you are looking for a date. When I go to a bar, I don't know who else is looking for a date. Granted, I'm 21 years old and should be able to tell who I should try to hit on, and I really should be over my fear of rejection, but I know I'm not alone. Knowing who is a viable candidate to date would make the dating world a lot easier for beginners. And again, that information is often available on social networking websites such as Facebook.

Suggested Improvements

I propose that we develop an app that takes an image and uses facial recognition to match the Facebook profiles to faces in the image. The faces could either be drawn from profile pictures or other pictures visible to the user on Facebook that have faces tagged. Taking a picture with your phone isn't

very subtle, so my proposition assumes some discreet camera on the user's body that is wirelessly connected to the phone. For example, it could be a pin or button on the user's shirt, jacket, or backpack. The app then takes a picture using the pinned camera and can either show information about a specific person, or to search for people meeting certain criteria in the photo.

Matching Facebook photos to faces on a photo might be difficult because many people only have their profile picture visible to the general public which isn't a very good training data. Further, not everyone uses their face at all on their Facebook profile. Nonetheless, the app should be able to match at least some people, and that's definitely something to build off of to start a conversation with a stranger.

It might be unusual for a stranger to know so much about you without ever having talking to them before. However, as social networking sites become more popular, it is becoming commonplace for people share personal information like hobbies, interests and relationship information, to people you don't know online. This open exchange of personal information could translate to the real world with an app like this. It may even seem creepy or unnecessarily intrusive, but that's how many people including myself felt about Facebook and MySpace, but now they are embraced by millions and are becoming the primary hub for social interaction for younger generations.

Scenario Walkthrough

My Astronomy 101 class has about 300 hundred students, and I don't recognize any faces in the auditorium. I would like to meet someone in the class to exchange notes or to work on homework together with, but it's incredibly intimidating when there are so many people in the class. There are so many people with so many backgrounds, majors, and interests, that if I end up talking to someone, it will end up being a very short conversation and we don't talk again.

However, if I used the camera and app to find someone in the class who is also a computer science or engineering major, we would have a bit to talk about, particularly because I'm a graduating senior and students in Astronomy 101 are typically freshman or sophomores. Alternatively, I could find a student in the class who is also enjoys playing Mario Kart or Pokémon, which would give us something to talk about outside of class and school. Finally, I could search the class for a girl who is single with interests that are similar to mine so that I could not only try to find someone to share notes with, but someone to attempt and fail to flirt with.