Can Artificial Intelligence Guess Your Age?

Topic Overview:

Artificial Intelligence (AI) is the latest tool Computer Scientists are using to solve problems. It is commonly used to interpret large amounts of data and form prediction analysis based on that data. The prediction skills that the AI learns are alarmingly accurate. Some of the most popular projects include Tesla’s self-driving AI, and the talking robot Sophia which is a project that attempts to speak to humans in a natural, conversational way while portraying emotions through inflection and facial expressions.

The problem of determining one’s age with a picture or video will be useful for a few different applications. In the case of Sofia, having a robot that can understand the age of her surrounding audience will allow the robot to make more informed speech responses. In everyday conversation, people speak differently to individuals based on their age. For example, a seventeen-year-old girl may not understand a reference to the popular Avatar movie released in 2009 or some other popular culture reference that is not applicable to her generation. So, if a robot can understand the age of its audience, it will be able to make more natural conversation that accurately reflects that of a human.

Project Plan

Preceding the project, I will educate myself about Artificial Intelligence and learn how to use it in my programming development. This will be accomplished by enrolling in and completing 3 courses in AI at ASU. I will begin the project by researching similar AI projects and take notes of the techniques and strategies they implemented. The next step will include determining what the final product should accomplish. From these requirements, I will create I will then confer with my committee members about what exact form of AI to use in my project. Their expertise and experience will help me build a skeleton of the software. I will then begin developing the software. During this time, I will meet with my committee members as needed, and showcase progress as it is made until a final product that meets requirements is completed.

Meetings

Professor Yang’s AAIR research lab meets every other week which I will attempt to frequently attend and discuss the project in those meetings. I will also meet with the committee members as needed during office hours or scheduled times as needed during the project.

Timeline

|  |  |
| --- | --- |
| **2019 Date** | **Task** |
| January 7th | Begin Artificial Intelligence courses at ASU,  Participate in bi-weekly meetings with the research lab |
| February 15th | Deadline to submit prospectus |
| May 4th | Complete AI courses,  Begin research of similar AI projects |
| May 20th | Confer with committee members about project implementation,  Outline and compose software requirements |
| June 4th | Begin development of age predicting software |
| September 6th | Meet with committee members and evaluate progress |
| October 11th | Schedule final defense date,  Submit defense reporting form |
| October 25th | Recommended Completed Defense |
| November 15th | Final Submission deadline |