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What is the project focus/overall goal?

- 1. The goal of this project is to identify inventors by race and to create an algorithm that improves Chinese and Korean character recognition.
- 2. Using that algorithm, then perform gender analysis of inventors based on Chinese & Korean characters.

What type of data will you collect or be analyzing?

- 1. We will analyze the data extracted by the previous team which contains detailed information about patents applications to USPTO from 2005 to 2022.
- 2. We will be collecting data from US patents and their equivalent patents in either CN or KR to extract inventor names in Korean/Chinese Characters and analyzing the differences in gender-matching.

What are potential limitations of the project?

- 1. There might not be enough data to make an overall accurate analysis and additional patent information may need to be pulled.
- 2. There are some Chinese and Korean characters that are not as common and might be missed.
- 3. The algorithm may be time consuming or expensive.

Why is this project important or Why did you choose this project?

- 1. The algorithm developed in this project will be very useful for predicting the gender of inventors with more accuracy.
- 2. The Chinese & Korean Character Recognition that will be developed can also be used for other tasks (like Optical Character Recognition,).
- 3. This project will provide a valid method for other fields like East Asian Cultural studies.
- 4. This project is important for Al developments (speech recognition, Computer Vision Language Translation, etc.)

What are your team's next steps? (include action items/tasks)

- 1. Review the previous team's work and look at the created database.
- Match patents with both a US patent and an equivalent patent filed in at least one of the Korean Patent Office or Chinese Patent Office (like https://patents.google.com/patent/KR101541682B1/en?q=korean+skincare&oq=korean+skincare)
- 3. Gender-match inventor names using Korean and Chinese characters

4. Treating the character name as the correct match, update the previous database's work and identify different outcomes

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