

Purpose

For this assignment, I want to examine whether the development history of social media and artificial intelligence are aligned with check-out book records in the Seattle library. Both social media and artificial intelligence are emerging technologies that have become known to the public and led to some heated discussions.

By comparing these two concept-related books' check-out records together and aligning them with the significant events in both fields, this analysis can provide us some insights into how the public gets to learn about new technologies through borrowing book from the library.

Queries

```
SELECT
YEAR(cout) AS years,
COUNT(cout) AS counts
FROM
spl_2016.outraw
WHERE
((LOWER(title) LIKE '%social media%')
  OR '%social networking site%'
  OR '%social networking sites%')
```

```
AND YEAR(cout) <= '2022'
GROUP BY years
ORDER BY years ASC;
```

```
SELECT
YEAR(cout) AS years,
COUNT(cout) AS counts
FROM
spl_2016.outraw
WHERE
(( LOWER(title) LIKE '%artificial intelligence%')
  OR '%ai%')
AND YEAR(cout) <= '2022'
GROUP BY years
ORDER BY years ASC;
```

```
SELECT
YEAR(cout) AS years,
MONTH(cout) AS months,
COUNT(cout) AS counts
FROM
spl_2016.outraw
WHERE
```

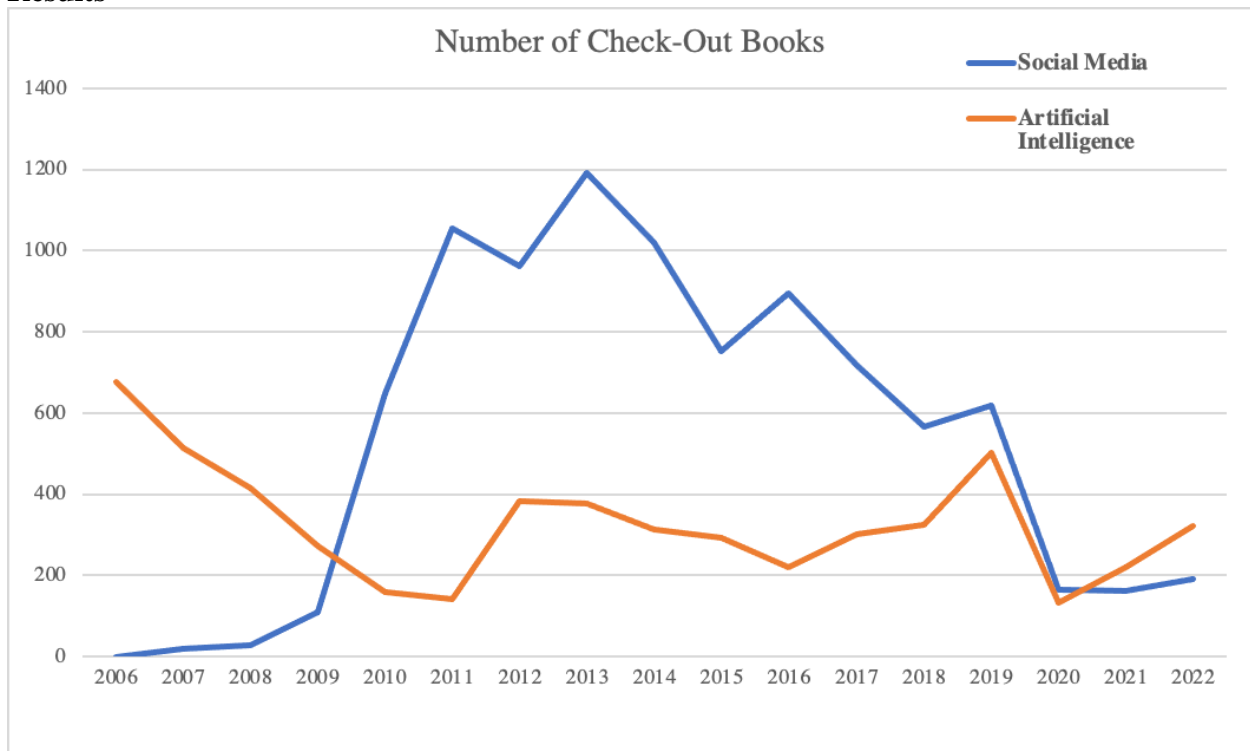
```

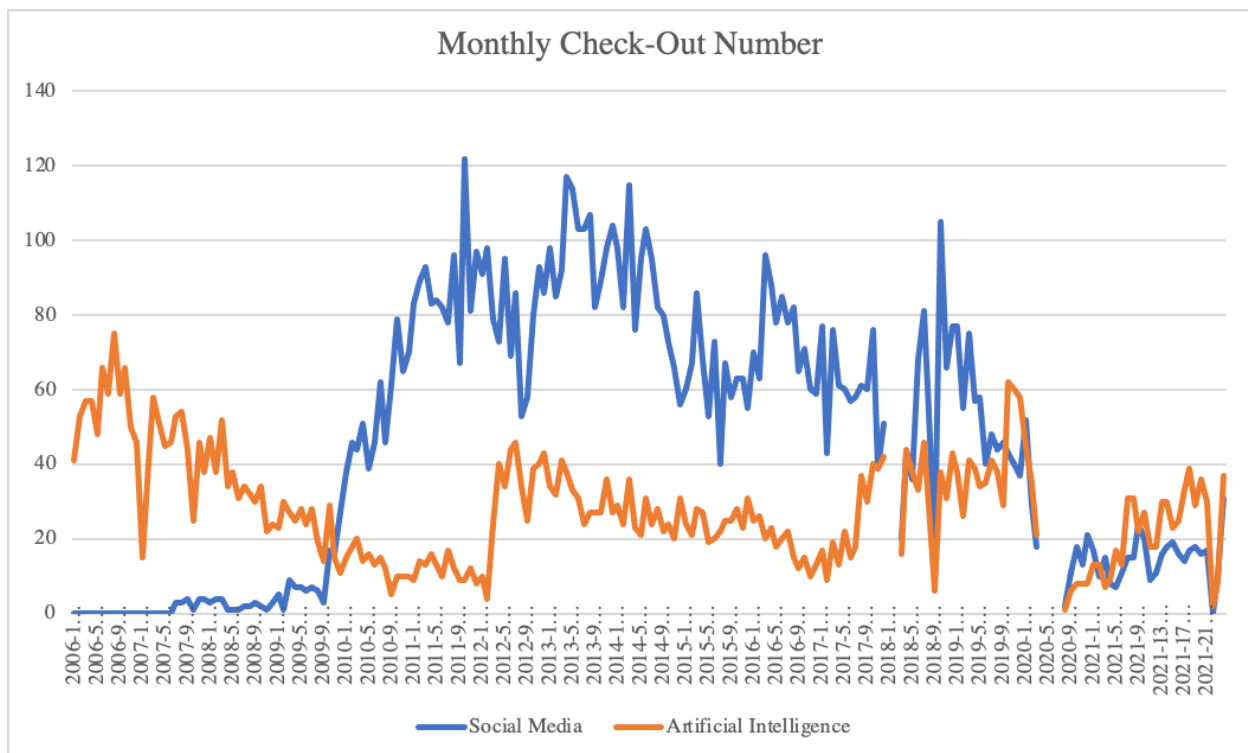
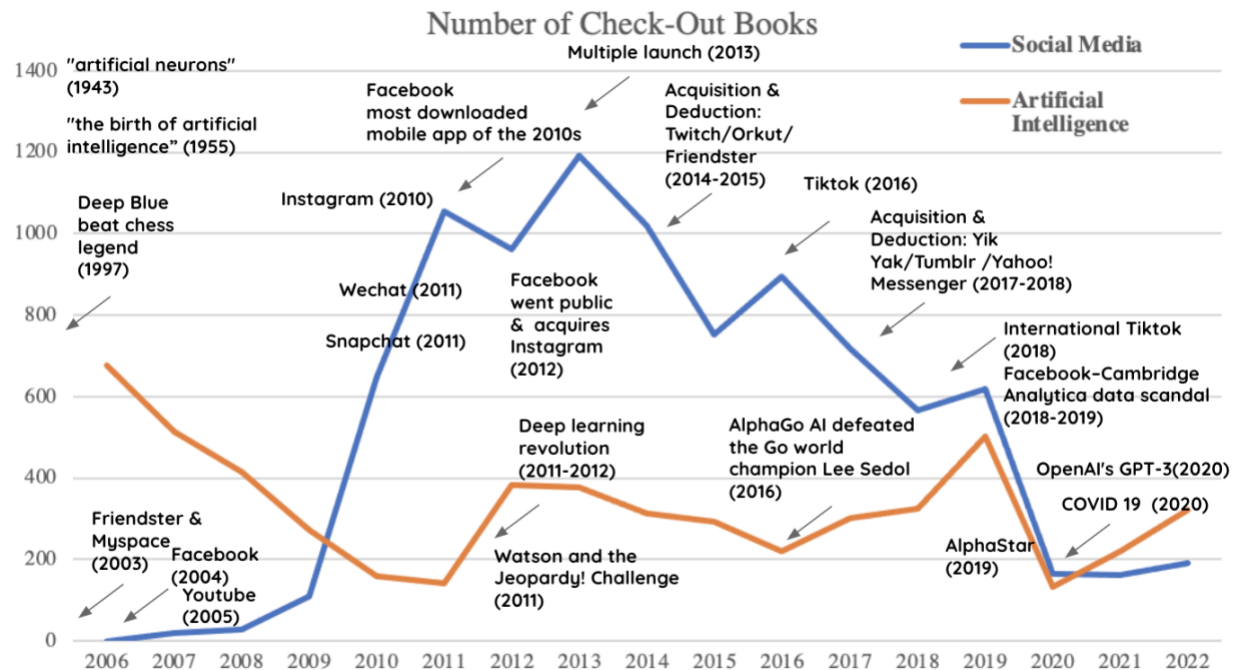
((LOWER(title) LIKE '%social media%'
  OR '%social networking site%'
  OR '%social networking sites%')
AND YEAR(cout) <= '2022'
GROUP BY years, months;

SELECT
YEAR(cout) AS years,
MONTH(cout) AS months,
COUNT(cout) AS counts
FROM
spl_2016.outraw
WHERE
(( LOWER(title) LIKE '%artificial intelligence%'
OR '%ai%')
AND YEAR(cout) <= '2022'
GROUP BY years, months

```

Results





Discussion

The tendency to check out social media-related books was more aligned with the significant events in this field. There were more ups and downs in the graph. In comparison, the tendency to check out AI-related books was more aligned with the development of technology itself. It is

partially related to some big news events (e.g., AlphaGo defeated the Go world champion), but not driven by public attention.

These differences may be caused by the unique development path of each technology. The popularity of social media relies on the public's use of these social media platforms. There was a lot of competition between these platforms, as well as the coexistence of different generations of social media. However, Artificial Intelligence requires certain expertise (e.g., programming knowledge) to understand its concepts, mechanisms, and applications. Although this technology is relatively new and developing rapidly, the original concept of AI has existed for a long time in literature (e.g., science fiction) and philosophy discussions.