

Scientific Computing with Python*

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Projects

1. Time distance based Location recommendation system using FourSquare Data
2. IMDB Database of Hollywood Actors and Actresses
3. Interest based location recommendation system using FourSquare Data
4. BIXI: Bike Station Live feed
5. Twitter Data Analysis

Project Marking

1. Completion of first milestone due date **22 December 2020**

A one page brief on how you intend to solve the problem in terms of algorithm, tools, modules, data structures ? **(20 Marks)**

2. Completion of Second milestone due date **8 January 2021**

Partial results from project in terms of solving some of the question asked on the detailed project scope **(30 Marks)**

3. Completion of third and final milestone due date **29 January 2021**

Submit working source code and 5 page report **(50 Marks)**

Total marks for this project are 100 Marks

Projects

1. Time distance based Location recommendation system using FourSquare Data

- ➡ Location history of users (userID, venueID, lat, long)
- ➡ Social Networks of users (Friends)
- ➡ Main task will be to recommend new places and route based on the time distance (i.e. the place is near in terms of travelling time)
- ➡ Specific questions will be provided in next week

Projects

2. *IMDB Database of Hollywood Actors and Actresses*

The screenshot shows the IMDb website interface. At the top is a navigation bar with the IMDb logo, a search bar, and links to 'Movies, TV & Showtimes', 'Celebs, Events & Photos', 'News & Community', and 'Watchlist'. Below the navigation bar, the main content area features a list titled 'Top 50 Popular Hollywood Actors and Actresses' by user 'eng_error22', created on May 23, 2013, and last updated on May 24, 2013. The list is currently showing all 50 people, sorted by 'List order'. The first two entries are visible: 1. Johnny Depp (Actor, Edward Scissorhands) and 2. Al Pacino (Actor, The Godfather). To the right of the list, there are several sidebar widgets: 'List Activity' showing 310,030 views, 'Tell Your Friends' with a share button, 'Create a new list' with a link to 'Create a new list', 'Other Lists By eng_error22' with a link to 'See all lists by eng_error22', and a 'Feedback?' section.

Top 50 Popular Hollywood Actors and Actresses
by [eng_error22](#) created 23 May 2013 | last updated - 24 May 2013
Live :)

Showing all 50 People Sort by: List order View: [Grid] [List] [Table]

[Log in](#) to copy items to your own lists.

1. **Johnny Depp**
Actor, [Edward Scissorhands](#)
Johnny Depp is perhaps one of the most versatile actors of his day and age in Hollywood. He was born John Christopher Depp II in Owensboro, Kentucky, on June 9, 1963, to Betty Sue (Wells), who worked as a waitress, and John Christopher Depp, a civil engineer. Depp was raised in Florida. He dropped out of school when he was 15...

2. **Al Pacino**
Actor, [The Godfather](#)
One of the greatest actors in all of film history, Al Pacino

List Activity
Views: 310,030 | last 3

Tell Your Friends
Share this list: [Twitter](#)

[Like](#) 73 people like this.

Create a new list
List your movie, TV & cel
[Create a new list](#) »

Other Lists By eng_error22
[See all lists by eng_error22](#)

Feedback? [Tell us what about this feature.](#)

Projects

2. IMDB Database of Hollywood Actors and Actresses

- ➡ Data base should contains profile of actors
- ➡ Their all time movies, their ratings etc.
- ➡ Your software should list all the available actor list
- ➡ Specific questions will be provided in next week

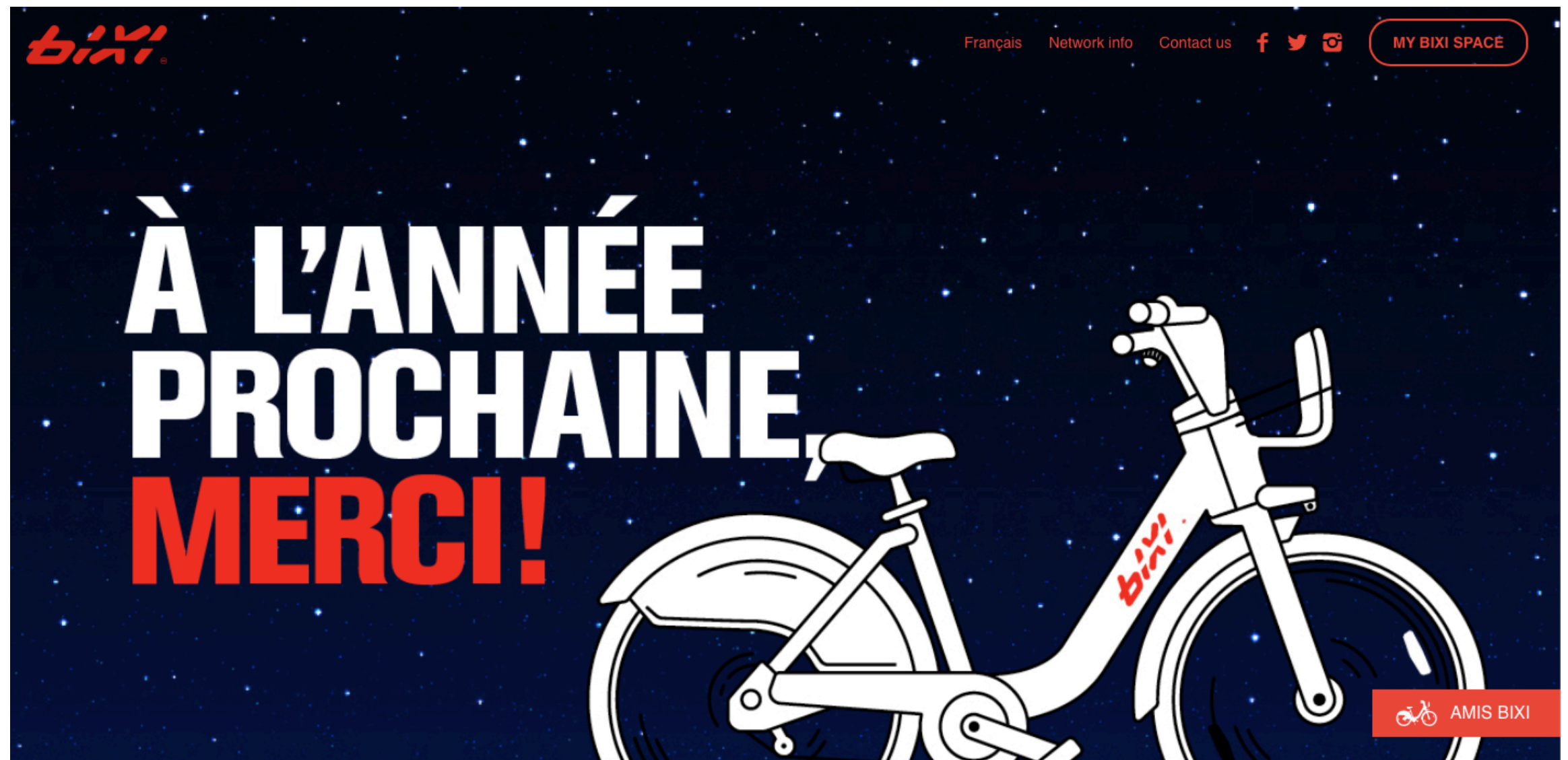
Projects

3. Interest based location recommendation system using FourSquare Data

- ➡ Location history of users (userID, venueID, lat, long)
- ➡ Semantic meaning of VenueID i.e. bar, park etc.
- ➡ Main task will be to recommend new places based on user interests.
- ➡ Specific questions will be provided in next week

Projects

4. *BIXI: Bike Station Live feed*



Projects

4. *BIXI: Toronto Bike Station Live feed*

- ➡ This dataset contains BIXI bike stations information sizes in the City of Toronto.
- ➡ Location of bikes, number of available bikes and docks.
- ➡ Main task will be to parse live feed and find the nearest bike and docks available.
- ➡ Specific questions will be provided in next week

Projects

5. Twitter Data Analysis

- ➡ You would need to acquire the Twitter data for a specific event using Twitter API.
- ➡ Process gathered tweets and users in terms of sentiment of tweet, their friends etc.
- ➡ Specific questions will be provided in next week

Project MileStones

- ➡ Project Upload -> **15th December 2020**
- ➡ Project Choice filling on Moodle -> **15th December 2020**
- ➡ Project Allocation -> **15th December 2020**
- ➡ **Deadline for 1st milestone -> 22nd December 2020**

Small write up for how you intend to solve the problem in terms of algorithm, tools, modules, data structures ?(20 pts)

Project MileStones

➡ **Deadline for 2nd milestone -> 8th January 2021**

*(Partial results from the project in terms of solving some questions)***(30pts)**

➡ **Deadline for 3rd milestone -> 29th January 2021**

(Submit working source code + report (max 5 pages))
(50pts)