

# Contents

<b>1 Social Network Analytics - Beginner's Guide</b>	<b>1</b>
1.1 What is this tool? . . . . .	1
1.2 Table of Contents . . . . .	1
1.3 Opening the Application . . . . .	1
1.4 Step 1: Upload Your Data . . . . .	2
1.5 Step 2: Choose What to Extract . . . . .	2
1.6 Step 3: Basic Settings . . . . .	4
1.7 Step 4: Run the Analysis . . . . .	4
1.8 Step 5: See Your Results . . . . .	5
1.9 Step 6: Download Your Network . . . . .	6
1.10 Common Questions . . . . .	6
1.11 Troubleshooting . . . . .	7
1.12 Need More Help? . . . . .	8
1.13 Quick Start Checklist . . . . .	8
1.14 Remember . . . . .	9

## 1 Social Network Analytics - Beginner's Guide

### 1.1 What is this tool?

Social Network Analytics is a web application that helps you understand connections and relationships in social media data. You upload your data (like tweets, posts, or comments), and the tool creates a visual map showing who mentions whom, what topics are discussed, and how everything connects together.

**Think of it like:** A map that shows how ideas, people, and topics are connected in your social media data.

---

### 1.2 Table of Contents

- 1. [Opening the Application](#)
  - 2. [Step 1: Upload Your Data](#)
  - 3. [Step 2: Choose What to Extract](#)
  - 4. [Step 3: Basic Settings](#)
  - 5. [Step 4: Run the Analysis](#)
  - 6. [Step 5: See Your Results](#)
  - 7. [Step 6: Download Your Network](#)
  - 8. [Common Questions](#)
  - 9. [Troubleshooting](#)
- 

### 1.3 Opening the Application

Someone (like your IT department or researcher) will give you a web address (URL) to open in your browser. It might look like: - `http://localhost:8501` (if running on your computer) - Or a web address like `http://your-server.com:8501`

Just click the link and the application will open in your web browser (Chrome, Firefox, Safari, etc.).

**That's it!** You don't need to install anything or write any code.

---

## 1.4 Step 1: Upload Your Data

### 1.4.1 What kind of file do I need?

You need a spreadsheet file (usually called CSV) or a special text file (NDJSON).

**Most commonly:** An Excel file saved as CSV (Comma Separated Values)

### 1.4.2 What should be in my file?

Your file needs at least two columns: 1. **Who wrote it** - usernames, names, or IDs of people 2. **What they wrote** - the actual text of posts, tweets, or comments

**Example:**

Username	Post Text
john_smith	“I love this product! #awesome”
mary_jane	“Thanks @john_smith for the recommendation!”
bob_jones	“Just visited Paris, amazing city!”

### 1.4.3 How do I upload?

1. Look for the section that says “**Upload Data**”
2. Click the “**Browse files**” or “**Choose a file**” button
3. Find your CSV file on your computer
4. Click “**Open**”

**You’ll know it worked when:** You see a preview of your data showing the first few rows.

### 1.4.4 Check your preview

After uploading, you’ll see: - **A table** showing the first 10 rows of your data - **File information** like size and number of rows - This helps you make sure you uploaded the right file!

---

## 1.5 Step 2: Choose What to Extract

This is the most important decision! You’re telling the tool what to look for in your text.

### 1.5.1 Which column has the authors/users?

Find the dropdown menu labeled “**Author Column**” and select which column contains the usernames or author names.

**Common names for this column:** - username - author - user - name - unique\_id

**The app usually guesses this correctly!** But check to make sure.

### 1.5.2 Which column has the text?

Find the dropdown menu labeled “**Text Column**” and select which column has the posts, tweets, or comments.

**Common names for this column:** - text - content - message - post - body

**Again, the app usually guesses correctly.**

### 1.5.3 What do you want to find in the text?

This is where you choose what the tool will extract. Look for the “Choose Extraction Method” menu on the left side.

#### 1.5.3.1 Option 1: Named Entities (Default - Best for News & General Content) Choose this if: Your posts mention real people, places, or organizations

**What it finds:** - Names of people (like “Joe Biden”, “Taylor Swift”) - Places (like “New York”, “France”, “Tokyo”) - Organizations (like “Google”, “United Nations”, “NASA”)

**Good for:** - News articles - Political discussions - Travel posts - Business content

**Example:** - Text: “Apple announced a new iPhone in California” - Finds: Apple (organization), California (place)

#### 1.5.3.2 Option 2: Hashtags (Best for Twitter/Instagram) Choose this if: Your data has hashtags and you want to see which topics are popular

**What it finds:** - Anything with a # symbol (like #politics, #love, #travel)

**Good for:** - Twitter/X posts - Instagram posts - TikTok captions

**Example:** - Text: “Beautiful sunset! #nature #photography #beach” - Finds: nature, photography, beach

#### 1.5.3.3 Option 3: Mentions (Best for Twitter/X Conversations) Choose this if: You want to see who mentions whom

**What it finds:** - Usernames mentioned with @ symbol (like @username)

**Good for:** - Twitter/X conversations - Instagram comments - Finding influential users

**Example:** - Text: “Great work @jane\_doe and @bob\_smith!” - Finds: jane\_doe, bob\_smith

#### 1.5.3.4 Option 4: Websites (Best for Link Sharing) Choose this if: You want to see which websites are being shared

**What it finds:** - Website addresses (like nytimes.com, youtube.com)

**Good for:** - News sharing - Link analysis - Source tracking

**Example:** - Text: “Check this out: https://www.bbc.com/news/article” - Finds: bbc.com

#### 1.5.3.5 Option 5: Keywords (Best for Finding Topics) Choose this if: You want to find the main topics and themes

**What it finds:** - Important words and phrases (automatically detected) - Filters out common words like “the”, “and”, “is”

**Good for:** - Topic discovery - Content analysis - Understanding what people talk about

**Example:** - Text: “Climate change is causing severe weather patterns” - Finds: climate change, severe weather patterns

#### 1.5.3.6 Option 6: Exact Text (Advanced) Choose this if: Your text column already has the exact categories you want

**Most people don't use this option** - it's for special cases.

---

## 1.6 Step 3: Basic Settings

You can usually **skip this section** and use the default settings! But here's what they mean if you want to adjust:

### 1.6.1 For Named Entities (if you chose that):

**Which types of things to find:** - Check the boxes for what you want: - Persons (people's names) - Locations (places) - Organizations (companies, groups)

**Confidence:** - This slider controls how "sure" the tool needs to be - **Higher** = More accurate, but finds fewer things - **Lower** = Finds more things, but may make mistakes - **Default (85%) is usually good**

### 1.6.2 For Keywords (if you chose that):

**How many keywords to find:** - Minimum: At least this many keywords per person - Maximum: No more than this many keywords per person - **Default (5-20) is usually good**

**Language:** - Choose the language of your text - English is default - Also supports Danish, Spanish, French, and others

### 1.6.3 Other Settings (Usually Don't Need to Change):

**Chunk Size:** - How many rows to process at once - **Don't change this unless the app is slow or crashes**

---

## 1.7 Step 4: Run the Analysis

### 1.7.1 Ready to go!

Once you've: 1. Uploaded your file 2. Selected author and text columns 3. Chosen what to extract 4. Adjusted settings (or kept defaults)

### 1.7.2 Click the big button!

Look for the blue button that says "**Start Processing**" or "**Start Processing**"

**Click it!**

### 1.7.3 What happens next?

You'll see: - A progress bar showing how much is done - Messages like "Processing chunk 1 of 5..." - Estimated time remaining

**How long does it take?** - Small files (1,000 rows): 10-30 seconds - Medium files (10,000 rows): 1-5 minutes - Large files (100,000 rows): 10-30 minutes

**What to do while waiting:** - Nothing! Just wait for it to finish - Don't close the browser window - Don't click "Start Processing" again

### 1.7.4 When it's done

You'll see a success message with numbers like: - "Processing Complete!" - "Posts processed: 5,000" - "Entities extracted: 1,234"

**Now scroll down to see your results!**

---

## 1.8 Step 5: See Your Results

### 1.8.1 The Numbers

At the top, you'll see some statistics:

**Total Nodes:** - This is everyone and everything in your network - Authors (people who posted) + Things they mentioned

**Total Edges:** - This is the connections between them - "John mentions Paris" = 1 edge

**Authors:** - How many unique people posted

**Entities:** - How many unique things were found (people, places, hashtags, etc.)

**Don't worry too much about these numbers** - the visualization is more interesting!

### 1.8.2 Top Mentioned Items

Below the numbers, you'll see a table showing: - What was mentioned most often - How many times it appeared - What type it is (person, place, hashtag, etc.)

**Example:**

Entity	Mentions	Type
New York	45	Location
climate change	32	Keyword
Biden	28	Person

This tells you what your data is mostly about!

### 1.8.3 The Network Visualization

This is the fun part! You'll see a **web of connected dots**.

**What am I looking at?**

- **Dots (Nodes)** = People or things
- **Lines (Edges)** = Connections
- **Colors:**
  - Blue dots = Authors (people who posted)
  - Orange dots = People mentioned
  - Green dots = Places
  - Red dots = Organizations
  - Other colors = Other types

**Size matters:** - **Big dots** = Very connected, mentioned a lot - **Small dots** = Less connected, mentioned rarely

**How to explore:**

1. **Hover your mouse over a dot** = See details about it
2. **Scroll your mouse wheel** = Zoom in and out
3. **Click and drag** = Move around the map
4. **Use the play button** = Watch the network rearrange itself

**What to look for:**

- **Clusters** = Groups of dots close together (related topics/communities)
- **Central dots** = Big dots in the middle (important people/topics)
- **Connections** = Who's connected to whom

#### 1.8.4 Understanding Your Network

**Dense cluster in the middle:** - This is the main conversation - Most connected people and topics

**Isolated dots on the edges:** - Less connected - Might be off-topic or one-time mentions

**Multiple clusters:** - Different sub-topics or communities - Each cluster is a different conversation

#### 1.8.5 Filter to Main Network

See the checkbox “**Giant Component Only**”?

**Check this box** to show only the biggest, most connected part of your network. This helps you focus on the main conversation.

---

### 1.9 Step 6: Download Your Network

Ready to save your results? Scroll down to “**Download Results**”.

#### 1.9.1 Which file should I download?

**For most people:**

**Download GEXF** (the first big download button) - This is the main file you want - Used with a program called **Gephi** (free network visualization software) - Best for creating professional-looking network diagrams

**To use it:** 1. Download the GEXF file 2. Go to <https://gephi.org> and download Gephi (free) 3. Open Gephi 4. File → Open → Select your GEXF file 5. Create beautiful network visualizations!

**Other files you might want:**

**Edge List CSV:** - Opens in Excel - Simple table showing: who → mentioned → what - Good for basic analysis

**Statistics JSON:** - Contains all the numbers - For advanced users who want to analyze further

#### 1.9.2 Saving for later

Once you download the files, **save them somewhere safe!**

You can: - Reopen them in Gephi anytime - Share them with colleagues - Include them in reports

**Tip:** Create a folder for your project and save all files there.

---

### 1.10 Common Questions

#### 1.10.1 Q: I uploaded my file but nothing happens

**Check:** - Is your file a CSV or NDJSON file? - Does it have at least two columns (author and text)? - Are the columns selected correctly?

**Try:** - Refresh the page and upload again - Make sure the file isn't corrupted

#### 1.10.2 Q: The processing is taking forever

**This is normal if:** - Your file is very large (10,000+ rows) - You chose Named Entities (this is the slowest method)

**To speed it up:** - Try a smaller sample of your data first - Choose a simpler method (like Hashtags or Mentions)

### **1.10.3 Q: I got an error message**

**Common fixes:** - Refresh the page and try again - Check that your columns are selected correctly - Make sure your text column actually has text in it - Try a different extraction method

### **1.10.4 Q: The network looks like a mess**

**This is normal!** Real social networks are messy.

**Try:** - Check the “Giant Component Only” box - Download to Gephi for better layout options - Zoom in on specific clusters - Filter to show only top items

### **1.10.5 Q: I don't see any results**

**Possible reasons:** - Your text column is empty - The extraction method didn't find anything - Confidence is set too high (for Named Entities)

**Solutions:** - Check your data preview - is there text? - Try a different extraction method - Lower the confidence slider (Named Entities)

### **1.10.6 Q: Can I process the same data again?**

**Yes!** You can: - Try different extraction methods - Adjust settings - Process as many times as you want  
The app is smart and remembers previous results, making it faster the second time.

### **1.10.7 Q: Is my data safe?**

**Yes!** - Your data stays on the computer/server running the app - Nothing is sent to the internet - Only you can see your results

### **1.10.8 Q: Do I need to install anything?**

**No!** - It works in your web browser - No downloads needed - No software to install

### **1.10.9 Q: Can I save my work?**

**Yes!** - Download the files (Step 6) - Save them on your computer - You can reopen them anytime

### **1.10.10 Q: What if I close the browser?**

**Your results will disappear.** - Make sure to download files before closing - You can always upload and process again

### **1.10.11 Q: Can I edit the visualization?**

**In the app:** Limited editing (zoom, filter)

**For full editing:** - Download GEXF file - Open in Gephi - Full control over colors, layout, labels, etc.

---

## **1.11 Troubleshooting**

### **1.11.1 Problem: “Error uploading file”**

**Solution:** - Make sure it's a CSV file - Try opening it in Excel first to check it's valid - Check the file isn't too large (over 100MB might have issues)

### **1.11.2 Problem: “No entities found”**

**Solution:** - Check your text column has actual text - Try a different extraction method - For Named Entities: lower the confidence slider

### **1.11.3 Problem: “App is very slow”**

**Solution:** - Close other browser tabs - Try a smaller file first (sample your data) - Use a simpler extraction method (Hashtags instead of Named Entities)

### **1.11.4 Problem: “Visualization won’t show”**

**Solution:** - Refresh the page - Try checking “Giant Component Only” - The network might be too large - it shows top 500 nodes for large networks

### **1.11.5 Problem: “Download button not working”**

**Solution:** - Check your browser allows downloads - Try a different browser - Right-click the button and “Save Link As”

### **1.11.6 Problem: “Results don’t make sense”**

**Solution:** - Check you selected the correct columns - Verify the extraction method matches your data type - Look at the data preview - is it what you expected?

### **1.11.7 Problem: “Can’t find the results”**

**Solution:** - Scroll down - results appear below the “Start Processing” button - Make sure processing finished (look for “ Processing Complete”) - Check for error messages in red

---

## **1.12 Need More Help?**

**If you’re stuck:** 1. Try refreshing the page and starting over 2. Test with a very small file first (just 100 rows) 3. Try the simplest extraction method (Hashtags or Mentions) 4. Ask whoever set up the app for help

**Things to tell them:** - What extraction method you chose - Any error messages you see - How many rows your file has - What happened when you clicked “Start Processing”

---

## **1.13 Quick Start Checklist**

Follow this simple checklist for success:

- Open the web app in your browser
- Upload your CSV file
- Check the data preview looks correct
- Select the author column (who wrote it)
- Select the text column (what they wrote)
- Choose extraction method:
  - News/general content? → Named Entities
  - Twitter data? → Hashtags or Mentions
  - Want topics? → Keywords
- Leave other settings as default (unless you know what they do)
- Click “Start Processing”
- Wait for it to finish (don’t close browser!)

- Scroll down to see results
  - Explore the visualization (hover, zoom, drag)
  - Download GEXF file to save your work
  - Done!
- 

## 1.14 Remember

**Don't be afraid to experiment!** - You can't break anything - Try different extraction methods - Play with the settings - Process the same data multiple times

**Start simple:** - Small file first - Basic extraction method - Default settings - Build up from there

**Have fun exploring your network!**

The tool is designed to help you discover patterns and connections you might not see otherwise. Enjoy the journey of exploring your data!

---

**Questions? Ask the person who set up the app for you.**

**Happy exploring!**