

# Music Data Aggregation & Insights Tool

SITM Connect TogetHER Music Tech

Juliette Mangon

Mentee

Anna Skelsey

Mentor

## **A&R teams and music professionals lack visibility into creative networks:**

Data about songs and artists is fragmented across platforms like Spotify, Apple Music, and Discogs, making it hard to see the bigger picture and provide valuable insights.

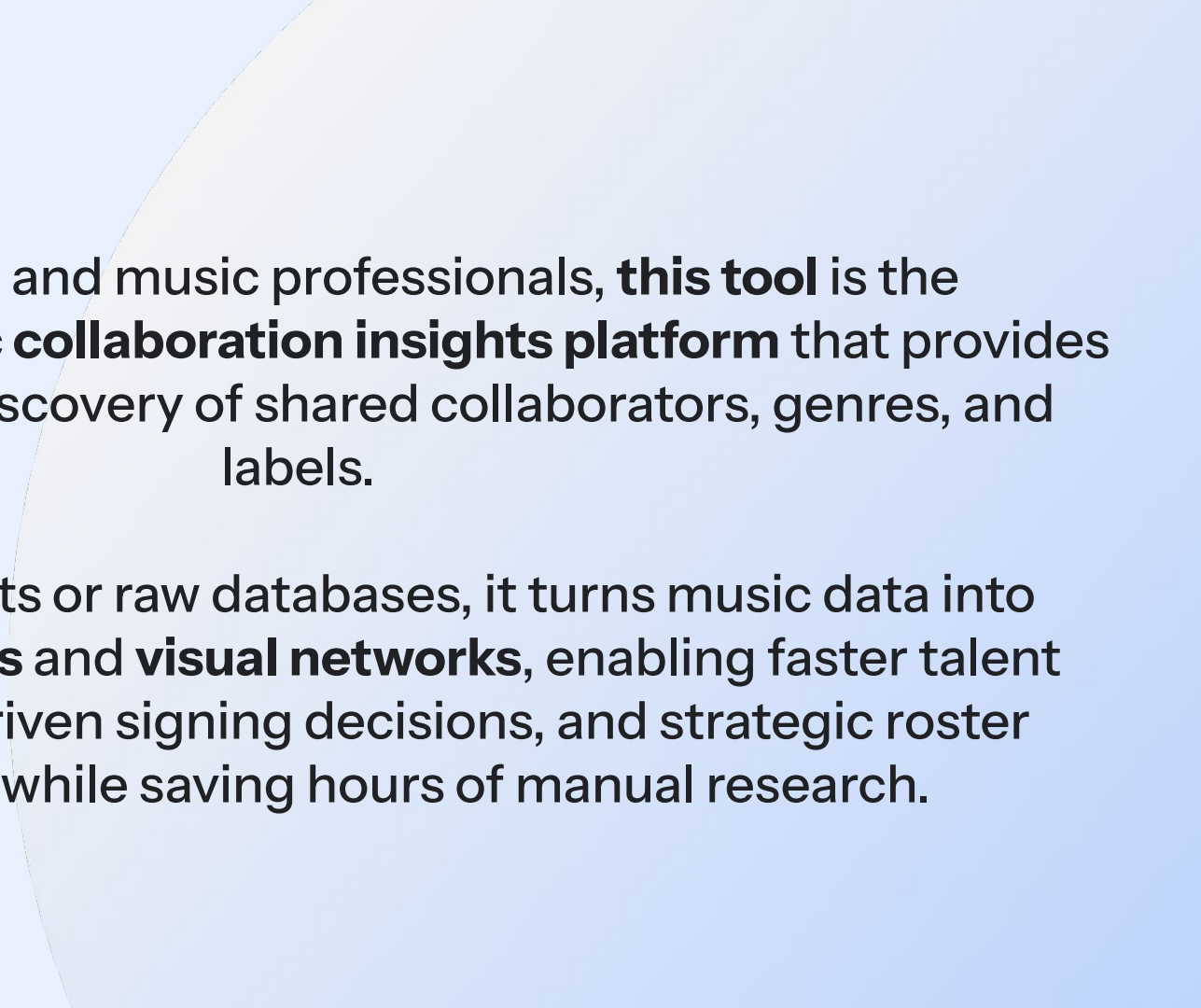
What this means today:

- Identifying common collaborators or creative clusters takes hours of manual research.
- Connections between labels, genres, and songwriters often go unnoticed.
- There's no way to explore collaboration trends interactively—only static credits.

# So What?

Without visibility into relationships and patterns, the industry remains reactive rather than proactive. Opportunities to shape trends and sign major talent often arrive too late, as others move faster.

In a market where collaboration drives hits, this lack of insight means missed strategic moves—like discovering the next breakout artist, spotting creative clusters, or capitalizing on cross-genre opportunities.



For A&R teams and music professionals, **this tool** is the **democratized music collaboration insights platform** that provides clear, interactive discovery of shared collaborators, genres, and labels.

Unlike **static** credits or raw databases, it turns music data into **actionable patterns** and **visual networks**, enabling faster talent discovery, data-driven signing decisions, and strategic roster development while saving hours of manual research.

# Why it matters for A&R and music professionals

- **Quickly spot emerging collaborator networks**  
→ Gain a competitive edge by identifying rising talent early for signings and partnerships.
- **Make data-driven talent decisions**  
→ Reduce risk and improve hit potential by validating creative networks and success patterns.
- **Reveal hidden relationships across songs**  
→ Uncover collaboration and genre crossover opportunities to drive innovative projects.
- **Save time with unified metadata**  
→ Eliminate manual research and accelerate deal-making with all data in one view.

# How It's Built

## 01 Data Aggregation

- Pulls information from MusicBrainz, Discogs, Spotify, SecondHandSongs.
- Standardizes credits and removes duplicates for accuracy.

## 02 Derived Insights

- Created algorithms to analyze combined data and surface patterns such as shared collaborators, genres, and labels.

## 03 Visual Graph

- Builds a network map of songs, collaborators, and related entities.
- Added filters and node details to allow deeper exploration of creative clusters.

## 04 Interface

- Simple, web-based interface for entering songs and viewing results.
- Designed interactive elements for comparing metadata and exploring insights.

# How it works

## 01 Song Input

Users enter one or more songs into the platform.

## 02 Data Aggregation & Storage

The system gathers information about the song(s) and stores it in a database for easy retrieval, historical tracking, and large-scale graph generation.

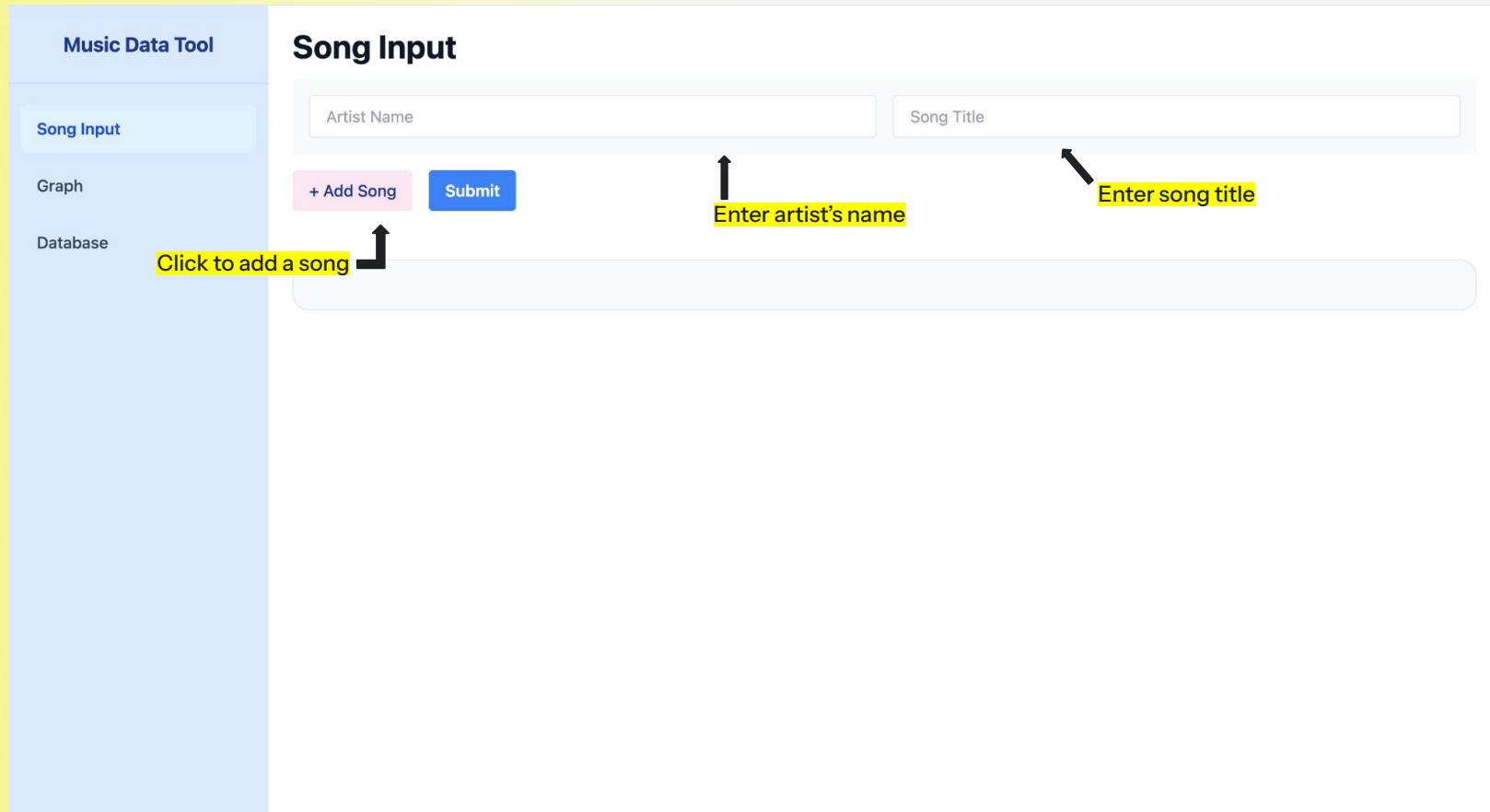
## 03 Detail Display

The data gathered for each song is displayed, and an insights section about the songs inputted is displayed at the bottom of the page.

## 04 Graph View

The graph tab to displays an interactive network of songs, and their attributes allowing users to click, filter, and explore connections visually.

# User Guide: Song Input Page



The image shows a web application interface for entering song data. On the left is a vertical sidebar with a blue background, containing the text "Music Data Tool" at the top, followed by "Song Input" (highlighted in light blue), "Graph", and "Database". The main content area has a white background and is titled "Song Input". It features two input fields: "Artist Name" and "Song Title". Below these fields are two buttons: a pink "+ Add Song" button and a blue "Submit" button. A large, empty, light gray rounded rectangle is positioned below the buttons. Three yellow callout boxes with black arrows provide instructions: "Click to add a song" points to the "+ Add Song" button, "Enter artist's name" points to the "Artist Name" input field, and "Enter song title" points to the "Song Title" input field.

**Music Data Tool**

- Song Input**
- Graph
- Database

## Song Input

Artist Name

Song Title

+ Add Song

Submit

Click to add a song

Enter artist's name

Enter song title



# User Guide: Graph Visualization Page

Music Data Tool

Song Input

Graph

Database

## Graph Visualization

Graph Current Input

Graph Database

Reset Filters

☒ Contributors ☒ Labels ☒ Publishers ☒ Genres Track Pop:  0+ Artist Pop:  0+

Click checkboxes to add or remove node types

Drag higher to only view artists or songs in a higher range of popularity

Legend

- Song
- Contributor
- Label
- Publisher
- Genre

Node Details

Select a node to view details.

# User Guide: Graph Visualization Page

## Music Data Tool

## Graph Visualization

### Graph Current Input

## Graph Database

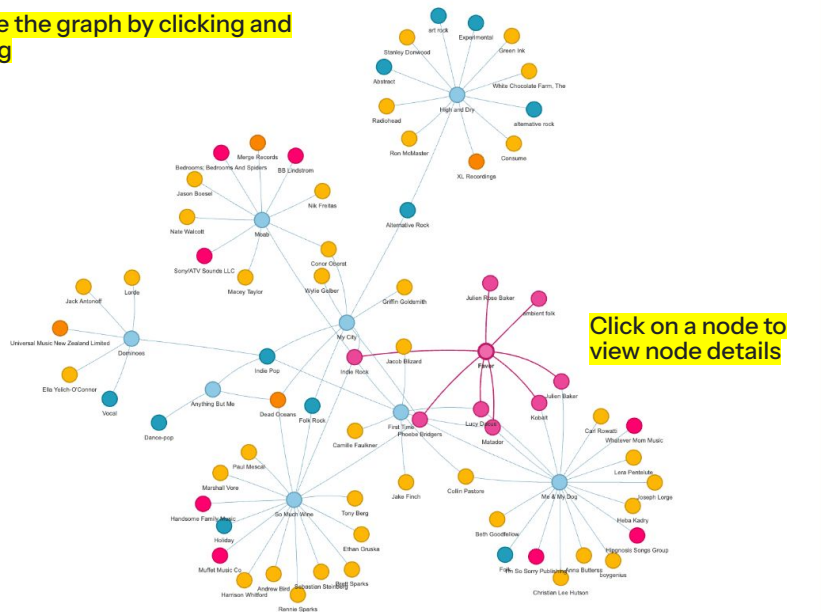
## Reset Filters

### Song Input

☒ Contributors ☒ Labels ☒ Publishers ☒ Genres Track Pop:  0+ Artist Pop:  0+

Click "Graph Current Input" to view the graph visualization of the songs you just inputted

Navigate the graph by clicking and dragging



Click on a node to view node details

### Legend

- Song
- Contributor
- Label
- Publisher
- Genre

### Node Details

**Favor**

**Artist:** Julien Baker  
**Album:** Little Oblivions  
**Label:** Matador  
**Genres:** Indie Rock, ambient folk  
**Track Popularity:** 42  
**Artist Popularity:** 66

# User Guide: Graph Visualization Page

**Music Data Tool**

Song Input

**Graph**

Database

## Graph Visualization

**Graph Current Input** **Graph Database** Reset Filters

☒ Contributors ☒ Labels ☒ Publishers ☒ Genres Track Pop:  0+ Artist Pop:  0+

Use normal two finger zoom to zoom into parts of the graph

Rearrange the graph by dragging nodes to desired area

**Legend**

- Song
- Contributor
- Label
- Publisher
- Genre

**Node Details**

Select a node to view details.

# User Guide: Database page

**Music Data Tool**

Song Input

Graph

**Database**

## Database

First section: all songs ever inputted by user and their details

**Me & My Dog**  
boygenius

Expand

**Moab**  
Conor Oberst

Expand

**So Much Wine**  
Phoebe Bridgers

Expand

**First Time**  
Lucy Dacus

Expand

**My City**  
Better Oblivion Community Center

Expand

**Favor**  
Julien Baker

Expand

**Dominoes**  
Lorde

Expand

**High and Dry**  
Radiohead

Expand

**Anything But Me**  
MUNA

Expand

Expand All

Collapse All

Right click on a song card to remove it from the database

### Derived Insights

Click an insight to highlight applicable songs

Songs: 9, Unique Contributors: 40, Unique Labels: 5

**Clustering** Contributors who worked together on multiple songs

Julien Baker, Lucy Dacus, Phoebe Bridgers worked on 2 songs together

Lucy Dacus, Collin Pastore worked on 2 songs together

**Linking** A contributor who connects others that don't otherwise share a song

Lucy Dacus links Julien Baker, Jacob Blizard, Jake Finch

Phoebe Bridgers links Julien Baker, Paul Mescal, Sebastian Steinberg

Collin Pastore links Julien Baker, Jacob Blizard, Jake Finch

Conor Oberst links Macey Taylor, Wylie Gelber, Griffin Goldsmith

Second Section: derived insights about full database

# User Guide: Database page

**Music Data Tool**

Song Input

Graph

Database

## Database

Click on a derived insight to highlight applicable songs

Expand AllCollapse All

**Me & My Dog**  
boygeniusExpand

**Moab**  
Conor OberstExpand

**So Much Wine**  
Phoebe BridgersExpand

**First Time**  
Lucy DacusExpand

**My City**  
Better Oblivion Community CenterExpand

**Favor**  
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# Demo:

**Music Data Tool**

**Song Input**

Graph

Database

boygenius

Me & My Dog

Conor Oberst

Moab

Remove

Phoebe Bridgers

So Much Wine

Remove

Lucy Dacus

Fñ

Remove

+ Add Song

Submit



# Thank you!

Checkout my code: <https://github.com/juliettemangon2/She-is-the-music-project>

Juliette Mangon

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Anna Skelsey

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