ABOUT MY PROJECT

My final project, **Assistance Denied**, is a visualization of **500+ film productions** that requested support from the U.S. Department of Defense (DoD) in the last century. My goal was to create an experience that made it easy for anyone to explore these questions:

- How does collaboration between the U.S. military and Hollywood work?
- Why do they even collaborate?
- What kinds of movies get military support?
- What can we learn from films that do — or don't — make the cut?

I built the project in **Vue 3**, with **D3** for added data manipulation and utility functions.

HOW I CHOSE MY TOPIC

My project actually started with a completely different focus: I wanted to explore how the language used to recruit police officers might affect what they think of as "their job". I learned through basic research that the military is a **major recruiting ground** for new officers, and veterans who apply get **special benefits**, including extra points added to their entry exam.

Data on the propaganda used to recruit police officers was very hard to find. However, it did lead me to the Wikipedia page on the **military-entertainment complex**, which cited the **Pentagon-Hollywood Collaboration database** as a source. That was the turning point.

I didn't know much about the relationship between the military and the media before this project. I knew vaguely that Michael Bay got help from the Army to make Transformers, and that's why (I assumed) they're featured so positively in his films. Finding the database felt like a gold mine — it didn't take long for me to have tons of questions. I chose this topic partly to satisfy my own curiosity, and partly because I thought I could actually do it justice.
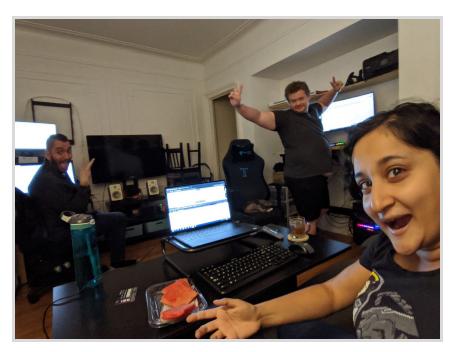
DATA SOURCE AND PREPARATION

My primary data source was the **Pentagon-Hollywood Collaboration database**, a list of ~865 films and episodes of TV shows that requested support from the military. The **Internet Movie Database** (IMDb) supplied additional metadata. I decided to focus only on films in the dataset, for ease of analysis.

A snippet of the original database, a PDF file

One of the biggest obstacles early on in my project — the part that took the longest — was getting my primary data source ready to use. The original dataset was **locked in a PDF file** that turned into a garbled mess when converted to a spreadsheet. I even emailed the journalist who submitted the original FOIA request in 2017 — Tom Secker, the owner of the **Spy Culture** website — to ask if he had the file in any other format, and Tom told me that's how he got the data from the Department of Defense.

That led me to think that the only way to ensure an accurate data source was to transcribe it by hand. I got a few (very generous and patient) friends together, put on some movie soundtracks for inspiration, and copied and pasted the entire database into a Google spreadsheet, spell-checking along the way.

Pictured: a data entry party

In retrospect I might have tried a little harder to look for OCR software, but I'm glad, in the end, that I worked through a good portion of the database by hand. I understood the data much more deeply, and found it especially valuable to hear what my friends found interesting or curious about it. Their observations actually helped inform a lot of my later design decisions. I got a more accurate dataset, bonding time with my friends, and free user research — I see it as win-win-win.

The final step in preparing the data was merging it with information from IMDb using the **OMDb API**. I made a simple script that looked up the film by name and returned a JSON with metadata, and hunted down any films that didn't have a match (mostly obscure movies from the early 1900s). I also corrected any film titles and years of release that the DoD entered incorrectly in the original database.

MAJOR DESIGN DECISIONS

My ad-hoc user research told me that the ability to explore the data by approval category — and see different slices of it over time — was very important. This gave me the idea of a "movie card" as a component and organizing principle.

Fonts, visual language, and movie card from my [design deck](#)

I started with designing the title. I chose Chakra Petch because it gave me a rugged military-ish vibe, and I used my old friends IBM Plex Sans and IBM Plex Serif for the headers and body copy because they are easy to read and have strong contrast between the regular and bold weights.

I knew I needed a consistent color language for the dataset's major categories. I chose the color **Middle Green Yellow** for the "APPROVED" category, which — keeping with the spirit of the data — is actually a shade of **Army Green**. From there, I chose colors for the remaining categories that would pop on a dark background and not overwhelm one other.

That was the easy part. Then, I had to figure out how to make a text-heavy dataset (from all of the remarks) accessible and easy to visualize. I got a lot of inspiration from The Pudding's project *[30 Years of American Anxieties](#)*, which led me to choose a **waffle chart** as the main visualization, with a **bar chart** supporting.

I then paused on the design for a while to learn Vue, using this excellent **Introduction to Vue 3** workshop led by Sarah Drasner. I could not figure out how to get scrollytelling to work in Vue 3 — although this Medium article on **IntersectionObserver and Vue** got me 90% of the way there — so I decided instead on a slideshow format, making liberal use of v-if directives. It also helped me pace the narrative.

TAKEAWAYS

There were two main takeaways that surprised me from the dataset:

- First, just the **length of time** that the military and Hollywood have been collaborating -- their relationship has been pretty much unchanged since the start of American cinema over 100 years ago.

- Second, how the **reasons for approval or denial** reveal so much about what the military thinks is important, and how it wants to be perceived in the minds of the public.

For example, the military has not historically supported stories that show **UFOs as real** (see *Cocoon*), military personnel **turning traitor** and killing their fellow officers, even for good reasons (see *Attack* and *War Hunt*), or **unfaithful military wives** (see *Rolling Thunder* and *Limbo*) — the latter because it would "hurt POW morale", according to *Limbo*'s remarks — or military personnel **acting dishonorably** in general.

FUTURE DIRECTIONS

I'm happy with how the project turned out, but if I had more time, I would definitely work on a few things:

- Making the project more mobile-responsive — the waffle chart gets so tiny!
- Adding the ability to sort the data by something other than year, e.g. IMDb rating.
- Figuring out scrollytelling / generally refactoring my Vue code.
- Providing more narrative — e.g. including more of my takeaways above.

DATA DOCUMENTATION

The clean dataset I used for my project can be found **at this link**. It contains **509 films** merged with data from IMDb, by default sorted by year of release. These are the fields:

Field Name	Type	Description
Title	String	The title of the film requesting military assistance
Status	String	How the military responded: APPROVED, DENIED, LIMITED, or OTHER
Remarks	String	Notes from the military about the collaboration process
Year	Date	The year the film was released
imdbID	String	The IMDb ID for the film; it appears in the URL of the film's IMDb page
Actors	String	The actors that appeared in the film
Awards	String	The awards or nominations the film earned, if any
Director	String	The directors of the film
Genre	String	A list of genres associated with the film
Plot	String	A short summary of the film's plot
Poster	URL	A link to the film's poster or advertising
imdbRating	Integer	The current rating (out of 10) for the film on IMDb
imdbVotes	Integer	The number of votes that went into the film's IMDb rating