

DeepScribe Leverages NLP to Automate Patient Documentation

01 The Story of DeepScribe

DeepScribe and Datasaur started working together in 2020. DeepScribe is a cutting-edge HealthTech startup that works on automating patient documentation for providers. This helps prevent burnout, automate workflows, and gives providers time back to spend with patients and generate revenue.

Their mission is to create a groundbreaking recording device capable of listening to patient encounters. The device will then run through AI to determine what's medically relevant, which will then be transcribed into formal medical wording and put into the patient's EHR. The provider can simply run the recording, check the EHR, and sign it off or make adjustments. This is a game-changer for patient-doctor interactions.

Case summary

Company name

DeepScribe

Location

San Francisco, CA

Industry

Hospitals and Healthcare

02 The Challenge of Rudimentary Data Labeling

DeepScribe has huge amounts of data on patient-provider encounters and needs to be able to accurately label that data as chief complaints, family history, prescriptions, and more. They need their data labeling to go to a very granular level. For example, a chief complaint needs to be labeled as such, and then it also needs to be labeled with a who/what/why/when/where sub-category, and so on. This helps teach the AI which specific phrases to look for and how things are categorized. The problem? This simply isn't possible with most NLP labeling tools on the market.

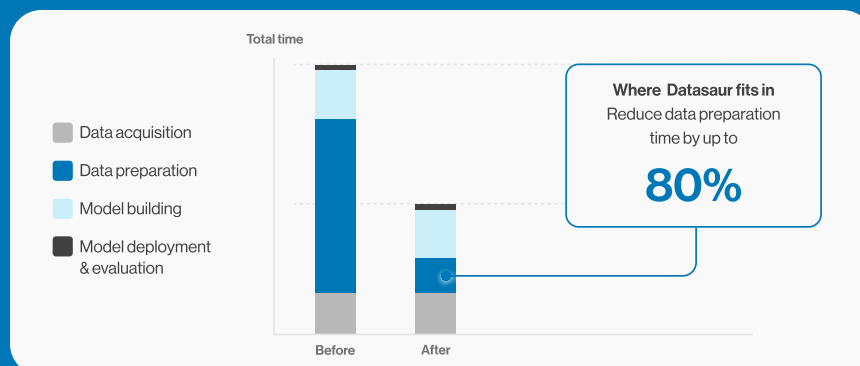



Fig 1. Datasaur reduces data preparation time by up to 80%



“ Instead of manually creating each project, we're able to automate the project creation... Instead of manually scrolling through hundreds of medical labels, we can rely on search functions. This has saved admins and team members a lot of time in their project workflows.

— DeepScribe

DeepScribe needed a tool that could handle layered and complex medical labeling, but they also needed ease of use and efficiency. They deal with a colossal taxonomy. Being able to label the data quickly, accurately, and efficiently was vital. Many tools either don't have the features, or are clunky and time-consuming to configure, which slows down production speed to a glacial pace.

03 Why DeepScribe Chose Datasaur

DeepScribe had a manual data labeling process before turning to Datasaur, which can be very time consuming and inefficient. They were using open-source tools and finding it painful to sift through the raw transcriptions in huge blocks of text, trawling through hundreds of labels to choose the right one. Not only that, they often had to manage the transcript in one place and then listen to the audio elsewhere because the transcription wasn't always accurate (and they needed the information to be medically accurate).

They had no hotkeys, no ways to search the labels, and no ways to automate project creation or export. They needed a robust tool that was built to handle the complexities of HealthTech NLP labeling.

Enter Datasaur. Datasaur is built to handle complex text and audio labeling projects with ease.



05 How Datasaur Responded

DeepScribe turned to Datasaur to handle and label the audio transcriptions. This has turned into:

1. Efficient Labeling

In Datasaur, DeepScribe now has a streamlined process for lining up and labeling transcriptions. They can split the projects up into smaller pieces to label, and the transcripts aren't a giant block of text to sift through. They can also organize their labels—and search through them—much faster.

2. Ease of Use

DeepScribe was drawn to Datasaur's UI/UX. DeepScribe deals with a massive taxonomy, and in Datasaur they're able to efficiently deploy that taxonomy and manage a large amount of labels with ease. Labeling dropdowns and hotkeys let them quickly search for a label without having to sink time scrolling for the label they're looking for.

3. Simple Automations

They were tired of manually creating each project, and wanted to automate project creation, saving team managers and admins a lot of time. Now, they can script it out, and if they have new files, Datasaur will create a project for their labelers through the API. This automates the project pipeline in a big way. They wanted something that they could more easily download the data from, import data, import new projects, etc.

4. Genuine Customer Support

In Datasaur, DeepScribe has a dedicated PM, and a customer service team that are on hand. The team takes the time to genuinely listen to their needs, hurdles, and feature requests. When they ran into a bug, the support team helped out instantly and resolved the issue really quickly so that their processes weren't disrupted. In their words “that was really cool. The customer support really stands out.”



06 The Results

After moving their NLP labeling processes to Datasaur, DeepScribe has noticed a few major changes. The first big change was to their tracking and review processes. They now have easy insight into their labelers and their projects, and they can zoom in or out to get the depth of reporting that they need. This means that they can spot check and keep labeling projects smoothly and efficiently, and can identify and remove roadblocks or inter-annotator disagreements in a fraction of the time.

Secondly, they've noticed that their project efficiency has greatly increased. Project creation and export is expedited in a huge way, labeling is faster and more efficient, and they've even run a proof of concept for Datasaur Assist. Datasaur Assist lets you provide files that were already labeled, and it will train a specific model and label new projects based on that labeling. It was successful and they're excited for the opportunity to scale up and automate the labeling experience down the road.

Datasaur lets your team build quality, trained datasets in a fraction of the time. Try a custom demo today and we'll gather datasets from your team to show you how your unique and workflow requirements would translate in Datasaur. This lets you see how streamlined and efficient your NLP data labeling workflow could be. Contact us at sales@datasaur.ai to schedule your custom demo!

About Datasaur

Datasaur is a private LLM provider and data labeling platform designed for companies to build their AI ecosystem with ease and efficiency. It assists organizations and universities in setting up custom LLMs and annotating data more efficiently and accurately through automation, quality control, and human-in-the-loop workflows. For more information, visit www.datasaur.ai.

Schedule a demo