OVERVIEW

To make sound decisions about customer and employee interactions, you need timely, useable data. This requires a platform that can process conversational interactions from disparate sources across your organization without impacting the availability and performance of your communications. Gridspace Sift is high-performance infrastructure software for capturing, processing and analyzing conversational interactions. The platform enables you to turn conversation into business-ready data across the enterprise to optimize decision-making.

Gridspace Sift platform accepts human-to-human and human-to-machine speech inputs from a variety of streaming and file-based sources. Gridspace Sift’s APIs return results in batch and real-time. Organizations can use the platform to enable specific services, for example Call Grading, or as a unified communications-awareness solution.

Gridspace Sift’s software-defined and integrated telephony, speech-to-text, and natural language understanding capabilities make it easy to deploy conversationally-aware services. With one platform, you can facilitate, monitor and catalog complex spoken interactions out-of-the-box. Additionally, built-in machine learning capabilities for speech recognition and natural language understanding allow for automatic model refinement and language extensions.
Benefits of Gridspace Sift:

- Enhance decision-making with real-time conversation data
- Find interaction bottlenecks and simplify business automation
- Increase IT flexibility and empower in-house developers
- Enable seamless data-enrichment of conversational audio
- Increase control over components with a unified, secure platform
- Integrate advanced machine learning with continuous learning
- Works with existing and new conversational data assets
- Easy to extend analytics and feed downstream applications
Use Cases

Call Grading

Call Grading learns your specific industry, domain, and application by example. Once a model has been trained with examples from your organization, it can match the performance of human respondents on many tasks, while also providing finer detail and less bias.

Common generic metrics extracted by the Gridspace-developed models include satisfaction, call resolution, proactivity, and empathy for the customer. These models allow you to immediately get results, while the system learns your domain and metrics.
USE CASES

NLU Topics

Topic extraction in Gridspace Sift is distinct from classification. While classification methods are restricted to a limited, and typically small, number of distinct classes, topic extraction attempts to describe audio content at a high level of abstraction. For example, "family vacation", "financial question," and "product return" are topics extracted using the Gridspace system.

Similar to classification, Gridspace’s topic extraction methods assume unreliable accuracy in the input streams. By using historical accuracy statistics for specific words and phrases under different contexts, the system can learn to model its own confidence. And, with large production datasets, a Gridspace Sift DNNs can predict topic relevance at various levels of abstraction given a context window. These models have been extremely effective and only improve as the system learns to better model failure modes and discover new independent clues as to what was being discussed, even when subtextual.
USE CASES

Classification

Categorizing singular interactions (e.g., a call center caller is requesting a quote versus calling about a bill) can be approached using rule-based and expert systems to some success. However, larger audio datasets can be used to train much more sophisticated (and accurate) classifications that implicitly learn the limitations of an input ASR system. Statistically consistent mistranscriptions, as well as the relationship between ASR results and auxiliary signal-based classifiers, can be used to build classifiers that assume mistakes earlier in the pipeline. These systems are less fragile and very adept at squeezing accuracy out of noisy input streams. Once systems are trained to absorb knowledge about ASR failures and signal data, classification accuracy can exceed 99%, in many cases outperforming human classification.
Gridspace was formed as a collaboration between SRI Speech Labs, the lab behind Siri, and a multidisciplinary team of designers and engineers. The company's software that tells businesses about their mission-critical voice communications. The company is backed by top investors including Bloomberg Beta, Wells Fargo Accelerator, Stanford University, the former COO of Facebook, CTO of Oracle, founding CTO of Yammer, and COO of Business Objects, among others. Gridspace is based in Los Angeles and San Francisco.