

Build Highly Accurate Speech Applications

With Next Generation Automatic Speech Recognition (ASR)



Develop Speech-Enabled Solutions that Boost Productivity & Improve CX

Precise Speech Recognition

Artificial Intelligence and Machine Learning Delivers Unrivaled Accuracy: The next-generation LumenVox Automatic Speech Recognition (ASR) transcription engine is built on a foundation of AI (Artificial Intelligence) and deep machine learning. Our ASR outpaces competitors and consistently delivers the most accurate speech-enabled voice experiences.

The LumenVox ASR engine is more effective than other offerings due to its end-to-end Deep Neural Network (DNN) architecture and state-of-the-art speech recognition processing capabilities. With a DNN based acoustic model at its core, the LumenVox ASR technology has made the usage of phonemes and other external lexicons unnecessary. The result is a modern, scalable, and streamlined approach to expanding language support, delivering world-class accuracy, and improving the customer experience.

Leverage a Multitude of Tools

Migrate and Fine-Tune Legacy and New Applications: The LumenVox ASR Engine enables customers to easily utilize speech recognition for traditional applications, such as IVRs (Interactive Voice Response) and voice enabled chatbots. It also integrates with new applications, such as virtual assistants, as well as audio research and analysis. LumenVox ASR provides a powerful set of tools to examine and fine tune the accuracy of any application and offers flexible language models to support a variety of industry-specific terms.

Integrate User Diversity

Recognize Multiple Dialects from a Single Global Language: Serving diverse customers in their native language and dialect enables companies to deliver superior experiences. The LumenVox ASR engine is built to support the various dialects and user accents that are associated with a specific language. Unlike other speech recognition providers, LumenVox ASR does not treat various dialects as separate languages. For example, there would be no need to implement multiple language packs for users who speak Central American, South American, or European varieties of Spanish. With LumenVox ASR, one model covers them all.

How LumenVox ASR Empowers Better Transcription Automation

Accurate Language Performance: A lower word error rate (WER) means applications can be accurately voice-enabled. Accuracy results in increased user trust, satisfaction, and adoption.

Wide-Ranging Language Recognition: LumenVox ASR's multi-language support provides great coverage for international users. Additionally, the end-to-end DNN ASR enables the inclusion of most, if not all, accents and dialects of a language in one language model.

Efficient Server-Side Speech Grammars: LumenVox ASR provides streamlined, efficient support for large speech recognition grammars through advanced server and client-side grammar caching. Large grammars can be compiled once, saved, and loaded again very quickly, without using valuable processor or memory resources.

Standard Protocols for Grammars & Services: LumenVox significantly reduces the learning curve that typically occurs in implementations, by following industry standards for grammars and services. Our Media Server supports MRCP (Media Resource Control Protocol) v1 and 2, and we are VXML (Voice Extensible Markup Language) and PCI (Payment Card Industry) compliant. In addition, our grammars can be written in GrXML or ABNF, with SISR and SRGS (Speech Recognition Grammar Specification) capabilities.

Greater Compression Ratio: A high compression ratio means that a greater number of words and phrases may be simultaneously matched to the speaker. The match is identified in real time - resulting in zero latency for the user as they interact with the application.

Network & Resource Efficiency: Improvements in density and runtime mean that the engine's "footprint" is smaller and requires less network and disk resources.

Clear Voice Detection: Whether the call is coming from a crowded restaurant or inside of a speeding car, the LumenVox Speech Recognizer separates speech from background noise using Voice Activity Detection (VAD). VAD listens for energy level, volume, frequency, pitch, and duration qualities to accurately detect speech.

Speedy Implementation or Migration: LumenVox makes it easy to replace your existing ASR with the new LumenVox ASR engine through standard protocols and development tools, and support for large speech recognition grammars.

Licensing Options that Fit Your Needs: Flexible licensing empowers our customers and partners to accommodate a variety of monetization models through a single licensing agreement. We offer a selection of options making it easier to deploy LumenVox technology in any network environment: on-premises, multi-cloud, or hybrid. We offer as well tenant level usage data to streamline billing to 3rd parties.

Cutting-Edge Speech Recognition = Great UX

Speech recognition presents an exciting and dynamic opportunity to create great user experiences. Speech applications today range from self-service applications such as banking voice-enabled chatbots, to mobile virtual assistants that allow users to speak commands and compose messages with their voice. There are also burgeoning applications such as automated medical triage, or audio mining for research and analysis.

LumenVox Innovation is the Foundation of Successful Speech Solutions


The ASR Engine is an integral part of LumenVox's modular portfolio of software. It is the basis for additional products in the LumenVox portfolio including the market-leading Call Progress Analysis. The LumenVox NLU (Natural Language Understanding) Gateway allows customers to utilize ASR transcription and integrate it with most major NLU intent engines, such as Amazon Lex, Google Dialogflow, Microsoft Luis, and IBM Watson.

Software that's Easy to Implement & Manage

LumenVox provides technology that helps companies speech-enable their applications to communicate more effectively with customers, reduce operating costs, and improve employee productivity.

Our portfolio of software products is designed to be easily implemented and managed. Unlike our competitors, LumenVox does not sell "solutions" that require extensive -- and expensive -- professional service resources to install, update, and manage.

LumenVox is well-known in the industry for outstanding customer service and strong partnerships. We guide you through the deployment process, providing superior support, education, and training throughout the entire customer journey.



Find out more about what LumenVox ASR can do for your business.

[Speak to an expert](#)

About LumenVox

LumenVox transforms customer communication. Our flexible and cost-effective technology enables you to create effortless, secure self-service and customer-agent interactions. We provide a complete suite of speech and authentication technology to make customer relations faster, stronger, and safer than ever before. And we do it all by putting you and your customers first.



Contact

hello@lumenvox.com

+1 (858) 707-7700

