Medilit Powers Medical AI Scribe with AMD Ryzen™ Embedded Processors

AI-based device generates real-time clinical notes during patient consultations, enhancing efficiency in patient care and reducing doctor burnout

AMD × MEDILIT

Medilit recognizes the dedication that healthcare professionals invest in patient care and documentation. The AI Scribe enhances doctors' daily routines by simplifying workflows and improving efficiency. This solution allows doctors to see more patients and spend less time on note taking and writing clinical records. Medilit's mission is to reshape digital health by supporting clinicians and enhancing patient care through cutting-edge AI solutions.

CHALLENGE

Medical professionals are often overwhelmed writing consult notes, referral letters, patient instructions, reports and plans. As a result, they're unable to maximize their time seeing patients and providing care. Medilit was looking to build a solution that provides a fast, accurate transcription of the patients visit with their doctor, allowing the transcriber to use AI to generate results in seconds.

"Healthcare professionals spend a significant amount of time on documenting clinical records and note taking. The current clinical management platforms are unable to reduce the documentation workload of healthcare professionals," said Naeim Abedi, cofounder and CEO of Medilit. "Clinical documentation can take up to two hours per day of a full-time doctor. We saw an opportunity to automate all of this paperwork, while ensuring the consistency and accuracy of the output using generative AI. Our solution has reduced time spent on clinical documentation to less than 30 minutes a day, saving 1.5 hours per day of a full-time doctor."

SOLUTION

Medilit has developed an AI medical scribe solution, set to release later this year, that generates clinical notes in real-time during patient consultations and automates medical forms, plans, and reports. The solution addresses outdated software and the time-consuming nature of documentation, which contribute to burnout among doctors. The AI Scribe uses AMD Ryzen™ Embedded 8000 Series processors for AI processing, including transcription, and to manage the solution's 15B-parameter large language model (LLM). The application leverages integrated AI Engines on the device to accelerate inference.

The AMD Ryzen™ Embedded processors have proven to be the best fit for Medilit. "There may be other CPUs that can run 15B parameter models, but generating one word every second or every few seconds. We need much better performance, and that's where AMD chips shine for us. It's at the level of speed and efficiency that we'd like to see all our LLMs run," Abedi said.

INDUSTRY

Healthcare

CHALLENGES

Medilit was looking to reduce the amount of time doctors spend writing patient notes, referrals, and clinical records.

SOLUTION

With the AMD Ryzen™ Embedded 8000 Series processor, Medilit has developed an AI solution that generates clinical notes in real-time during patient consultations and automates medical forms, plans, and reports.

RESULTS

The solution has been able to make the note-taking process and clinical record generation more efficient, allowing doctors to save time on clinical documentation.

AMD TECHNOLOGY AT A GLANCE

AMD Ryzen™ Embedded 8000 Series processors

Medilit's AI Scribe captures all relevant clinical information without omissions and handles complex and lengthy consultations with consistency, using a unique multi-agent and self-auditing system for enhanced accuracy and reliability.

The company's advanced speech recognition technology filters out background noise common in medical settings, accurately distinguishes between multiple speakers, and recognizes various accents and speech patterns. At the end of the consult, the product can generate a clinical note and send a referral document in seconds.

"Our device's speech-to-text technology is a real-time transcription tool that transcribes doctor-patient consultations live. It detects the current word along with the one before and after it, and it makes a decision," Abedi said. "The human ear has a 5% error rate. Our tests of the AI Scribe are showing higher accuracy rates."

Abedi added that after AI generates clinical notes, the doctor can review them before they are locked.

The small, 5-inch device plugs directly into the wall and is connected to a Bluetooth microphone. It supports more than 15 languages, and features a customizable, user-friendly interface. Medilit prioritizes data privacy by encrypting audio files and ensuring they are never stored. The company offers real-time transcription with end-to-end encryption, processing all data locally.

"For hospitals and large healthcare organizations, privacy is not negotioable," Abedi said.

RESULT

With Medilit's AI Scribe, medical professionals can achieve instant, detailed patient summaries for every consultation, saving time and resources.

"There are other cloud-based solutions in the market, but our key advantage is the level of output accuracy and consistency," Abedi said. "We've also designed the user interface to match the daily workflow of healthcare professionals, leveraging an advisory board of more than 40 doctors with a wide variety of specialties to make sure we got it right," he added.

Abedi said that Medilit was introduced to AMD by Avnet, who recommended AMD because of its performance.

The company believes its AI Scribe technology could be useful in other applications outside healthcare, including law enforcement and legal services.

> **"We are very satisfied with the support and communication that we've received from both Avnet and AMD," – Naeim Abedi, cofounder and CEO of Medilit**

Want to learn more about AMD Ryzen™ Embedded 8000 Series processors?
Visit our website.

ABOUT MEDILIT

Medilit is an Australian company specializing in AI-powered medical note-taking technology. Their product, called AI Scribe, is designed to streamline clinical documentation for healthcare professionals. It automates the generation of consultation notes, progress notes, referral letters, and other medical reports, significantly reducing the administrative burden on doctors and improving efficiency. Visit their website here.

ABOUT AMD

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