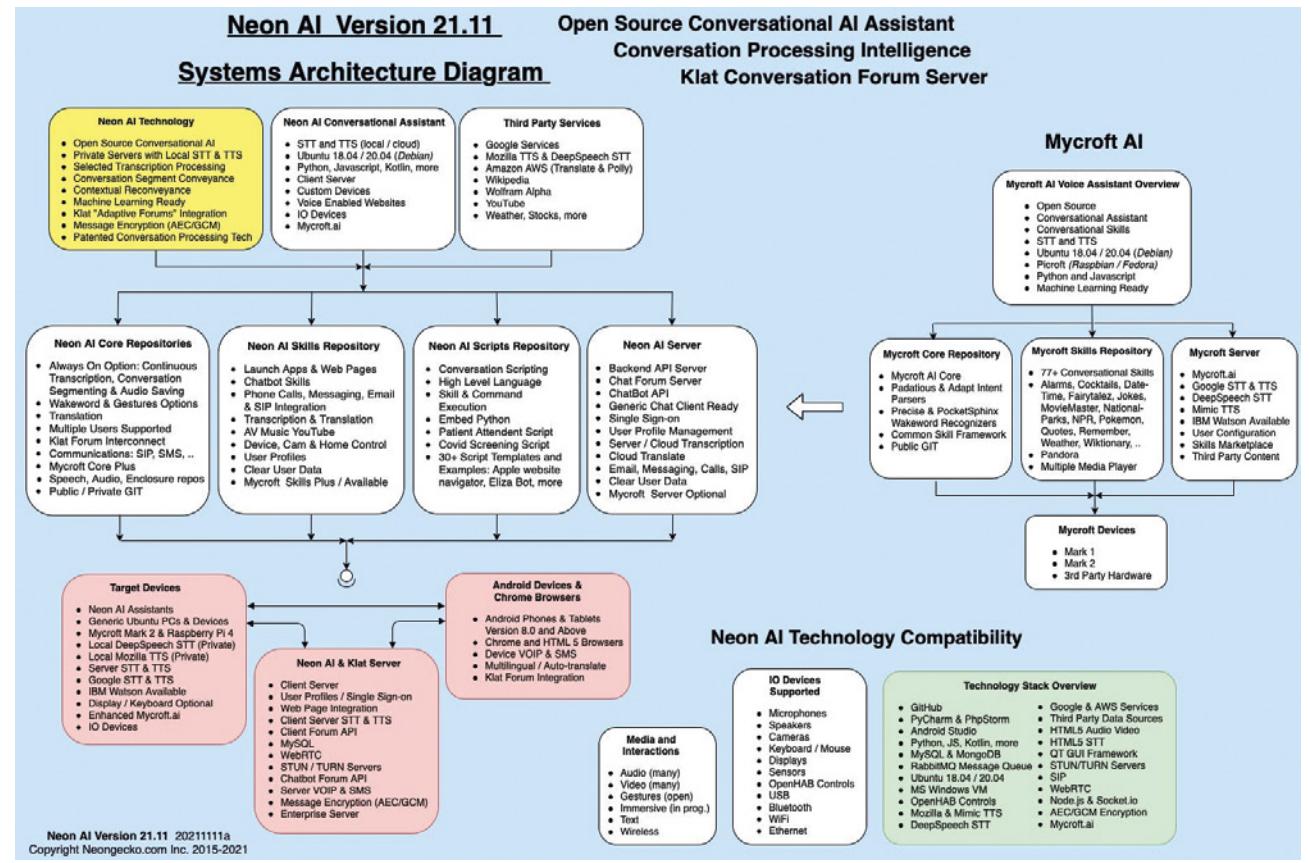# Neon AI
Conversational AI Made Ubiquitous

Speech and voice recognition AI has reached a stage where it is no longer regarded as a symposium gimmick but an all-pervasive resource that can propel society into the future. Some of the more progressive enterprise executives are already incorporating conversational AI into all departments starting with those heavily staffed by humans, such as sales, customer support and HR. And as the industry rides the coat tails of technical innovation toward a grand AI-centric future, it is equally essential to ensure that this power is wielded with data safety and control. To this end, open-source software—made by many people and distributed under an OSD - compliant license—grants the data owner rights to use, study, change, and share the copyrighted software in modified and unmodified form. As such, open-source software for conversational AI, ML, and NLP delivers much-needed software source code freedom, data privacy, and business application democratization.

Fulfilling this need is Neon AI, founded to help organizations through the daunting landscape of developing open-source digital voice applications. Neon AI creates cutting-edge conversational artificial intelligence technology solutions that empower users with real-time transcription, translation, voice command, audible advertising, conversation segment re-conveyance, contextual notification, adaptive forums, and much more. The company also provides conversational AI development kits for programming artificial intelligence applications for business, education, home, and websites, enabling developers to create their own speech and voice AI solutions. The 'Neon AI SDK' is the first "full-source" software development kit aimed specifically at full-stack conversational AI developers. Developers across thousands of different companies, labs, and universities worldwide can access a highly valuable tool set through the

kit, helping them determine the course of AI instead of a few corporations.

Neon AI not only makes conversational AI solutions easy to access, but also addresses the apprehension among SMB and enterprise markets around conversational AI integration. For many companies looking for automated customer communication solutions, the main challenge is adapting their current business practices and product lines to properly leverage conversational AI. The current very large providers of conversational AI solutions have created walled gardens. The result is a sort of entrapment wherein companies are locked in an ecosystem of the vendor's practice and technology, making it difficult to upgrade without major overhauls or recoding from scratch. Furthermore, the data is no longer private as many such very large vendor solutions ship the voice data and text back to their corporate HQ. This creates a particularly sharp pain point around the sharing of data with a central service. Neon AI helps clients get over this wall by providing open source alternatives to those very large vendor systems and, as a result, giving clients control over their own data. As Elon Gasper, CTO of Neon AI, puts it, "We bring new conversational AI technology to bear, which allows users to take a lot of their application research that they worked on beforehand and extend it with open-source alternatives, so they can keep control of their data and development. Plus, they can also use our technology to create customer service and other chatbots without having to recode or retrain their AIs from scratch." The platform works by enabling users to develop the expertise and systems necessary to make cutting-edge add-ons to their devices or software stack. It also helps clients tap into the open source community, enterprise systems, and conversational AI code based—all the advanced technology that Neon AI and others in the open source community have developed.

Neon technology was leveraged by one of the company's largest clients, a Fortune 100 industrial giant in the US, that was trying to use an open source solution to put together a conversational AI system in a new department. The company was looking to bring voice technology to bear in the training and support space for existing products, but they struggled to integrate with big tech solutions usually deployed at a consumer level. The client was unable to implement their conversational AI solution at the enterprise level without shipping the customer data—the voice requests and the information delivery by voice—to the software provider. However, they were contractually bound not to send that data outside their own servers and protected network. They looked at the open source community, found several possibilities, and sought to implement a new solution. Unfortunately, the client then ran into certain technical difficulties that were beyond their operating scope and required the years of experience that Neon AI has with an extensive conversational AI code base.

> We bring new conversational AI technology to bear, enabling users to integrate open source AI voice solutions plus take a lot of the programming that they worked on beforehand, then use it to combine customer service and other chatbots without having to recode it all from scratch

Neon AI was called in to help with integration, and they were able to help move the project along quickly to meet the required schedule by addressing issues and providing enhancements at the open-source systems levels. This enabled the application teams at the client company to sail past the bottlenecks that they had been trying to address with workarounds.

Neon AI has worked with such companies all over the US to address their automated communications needs. Having gained an in-depth understanding of the market needs, the company's goal is to now move beyond their current geography and explore conversational AI for other languages worldwide. The company also has interests in exploring the use of conversational AI in the healthcare sector and the online chatbot market, the latter of which is expected to grow from USD 2.9 billion in 2020 to USD 10.5 billion by 2026.

Businesses have invested a tremendous amount of time and money to create function-specific chatbots—those that interact with customers and/or those that interact with people within the organization—and to support those chatbots. However, when those companies try to integrate their chatbots together—many of which have been developed with neural net systems—they find themselves forced to retrain the whole application and redevelop the entire system, which is extremely time-consuming and expensive – even next to impossible when the training data and protocols are unrecoverable. To that end, Neon AI has developed a new technology called collaborative conversational AI, which enables these chatbots to collaborate with one another and with human beings with relative ease. With innovation on one hand and a passion for tech democracy on the other, the company looks to bring these marvelous inventions to the forefront of excellence, enhancing the future of collaborative and conversational AI in all our lives. **CR**