## Nuance and ROOBO Deliver Fully Optimized Audio Solutions for Smart Speakers, Robotics and IoT

LAS VEGAS (CES 2018) and BURLINGTON, Mass., January 4, 2018 – <u>Nuance Communications, Inc.</u> (NASDAQ: NUAN) and <u>ROOBO</u> today announced the availability of fully optimized, best-in-class hardware and software solutions, which will be sold by ROOBO, that can be widely adopted by original equipment and design manufacturers (OEMs and ODMs) across smart speakers, robotics and smart home devices.

Drastically reducing OEM and ODM development time, this new audio capture solution combines Nuance's market-proven speech signal enhancement algorithms with ROOBO's hardware/software expertise and speedy time to market, resulting in a complete solution that incorporates all critical elements necessary for smart home, smart speaker and robotic applications. Together, Nuance and ROOBO are simplifying what was previously a complicated development process; OEMs/ODMs typically develop hardware and software separately, integrating and testing performance at the end of the process. Now, OEMs and ODMs can take advantage of a pre-packaged, integrated hardware/software solution powered by Nuance and ROOBO, making adjustments to the end product as needed.

Nuance speech signal enhancement (SSE) is a suite of signal processing technologies that remove noise from microphone input and send out a cleaner signal for improved speech recognition and hands-free communication in noisy environments. Nuance SSE has been commercially used in the automotive domain for more than 15 years, as well as in the smart home and in PC and mobile applications, delivering optimal hands-free communication and speech recognition results. In its partnership with ROOBO, Nuance will provide SSE algorithms for wake up word, barge-in, 360-degree speaker localization, and far-field operations – critical technologies for smart speakers, robotics and smart home devices. In addition, Nuance's automatic speech recognition (ASR) is pre-trained to support these use cases.

In less than three years, ROOBO has transformed from an AI robotic product company to a global AI solution provider for all kinds of intelligent devices in several industries. Based in Beijing, China, ROOBO was named one of China's Top 10 most competitive AI start-ups in 2016 & 2017. Pudding BeanQ, the company's third-generation robot, was the winner of 2017 Red Dot Best of the Best Award. Jelly, the company's service robot, won an iF Design Award, Red Dot Award 2017 and IDEA Design Award in 2017. DOMGY, the company's pet robot, was featured on CNBC and TechCrunch in 2016.

"China is a hub for IoT innovation. In ROOBO, we've found a global hardware partner that shares our goal: providing OEMs and ODMs with pre-tested, high-quality solutions that are fully optimized to provide incredible end user experiences across the IoT," said Kenn Harper, vice president of Emerging Solutions, Nuance Mobile.

"By combining our respective hardware and software expertise, we and Nuance will have the ability to dramatically reduce time to market for OEMs and ODMs," said Fangming Yin, President, ROOBO. "This will result not only in speedier product development turnarounds, but also in higher quality of experiences for end users."

CES 2018 attendees can view experience these solutions in person at the 2018 Consumer Electronic Show (CES) in Las Vegas from January 9-12, 2018.

About Nuance Communications, Inc.

Nuance Communications, Inc. (NASDAQ: NUAN) is a leading provider of voice and language solutions for businesses and consumers around the world. Its technologies, applications and services make the user

experience more compelling by transforming the way people interact with devices and systems. Every day, millions of users and thousands of businesses experience Nuance's proven applications. For more information, please visit <a href="https://www.nuance.com">www.nuance.com</a>.

Trademark reference: Nuance and the Nuance logo are registered trademarks or trademarks of Nuance Communications, Inc. or its affiliates in the United States and/or other countries. All other trademarks referenced herein are the property of their respective owners.

About ROOBO

Founded in 2014, ROOBO is dedicated to becoming a world leading AI solution provider as well as a pioneer in consumer robotics. ROOBO's AI Operating System integrates cutting-edge AI and robotic technology to create a smarter and better life. Based in Beijing, the company has offices in Shenzhen, Suzhou and Moscow. For more information, visit: <a href="https://www.roobo.com">www.roobo.com</a>.

Contact Information

For Press

Kate Hickman

Nuance Communications, Inc.

Tel: 781-565-4627

Email: <u>kathryn.hickman@nuance.com</u>

Lin Yuan

**ROOBO** 

Tel: +86-10-8741-2000

Email: <a href="mailto:yuanlin@roobo.com">yuanlin@roobo.com</a>

https://news.nuance.com/2018-01-04-Nuance-and-ROOBO-Deliver-Fully-Optimized-Audio-Solutions-for-Smart-Speakers-Robotics-and-IoT