

tinyML® Builds

Ultra-low power machine learning at the edge success stories

Pete Warden – CEO, Useful Sensors

June 21, 2023



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Personalization

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distributed learning

Efficient learning

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through minimal data,
unsupervised learning,
on-device learning

A platform to scale AI across the industry



Perception

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recognition, contextual fusion



Reasoning

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Action

Reinforcement learning
for decision making



Edge cloud



Cloud



IoT/IIoT



Automotive



Mobile



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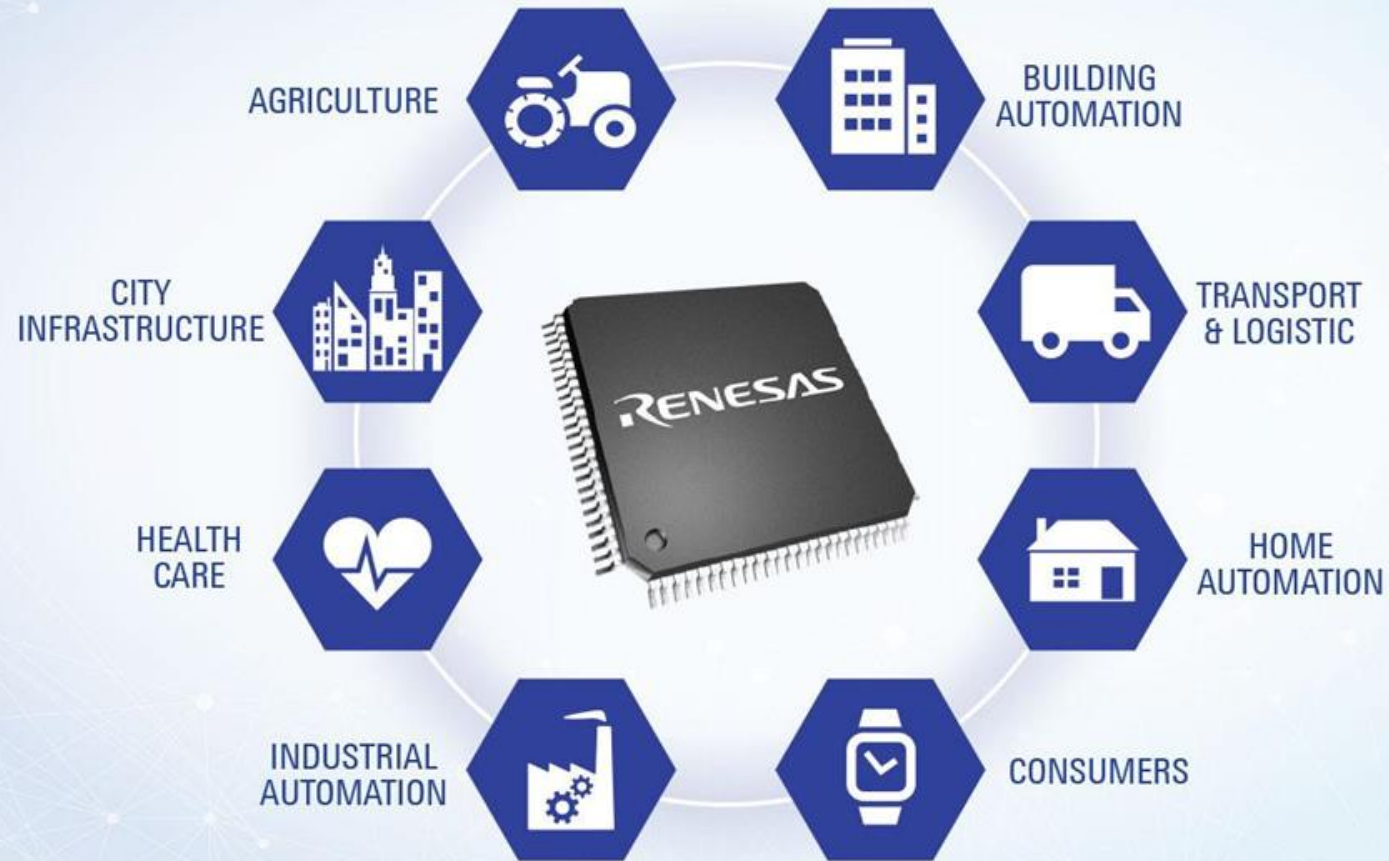
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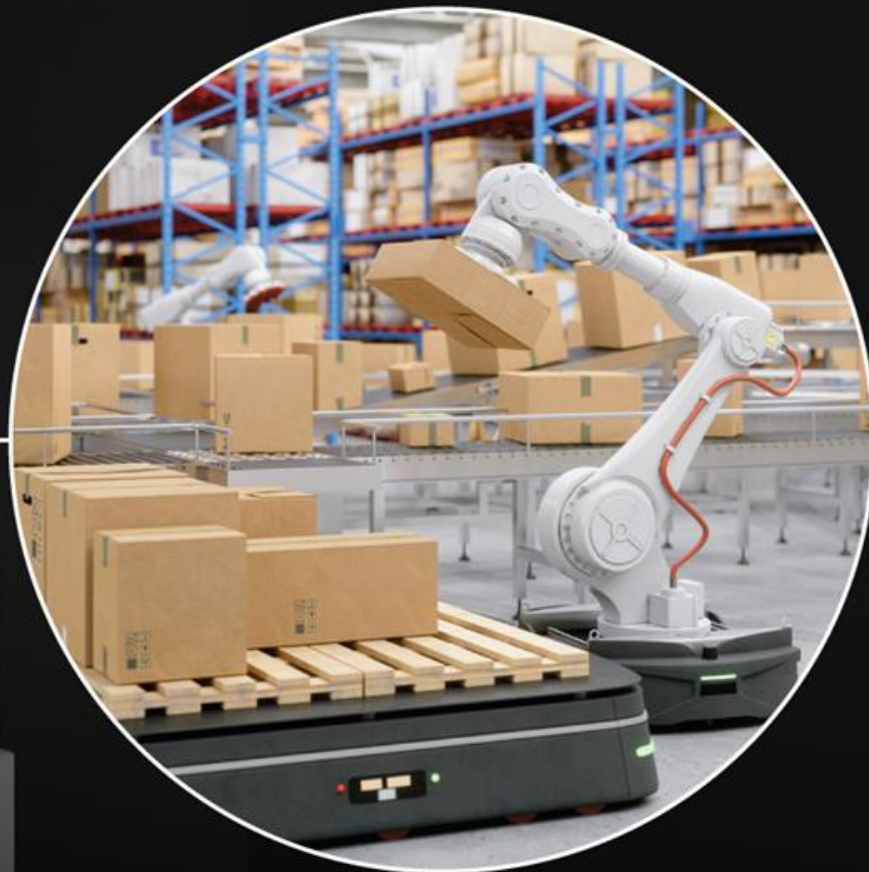
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Digitalization



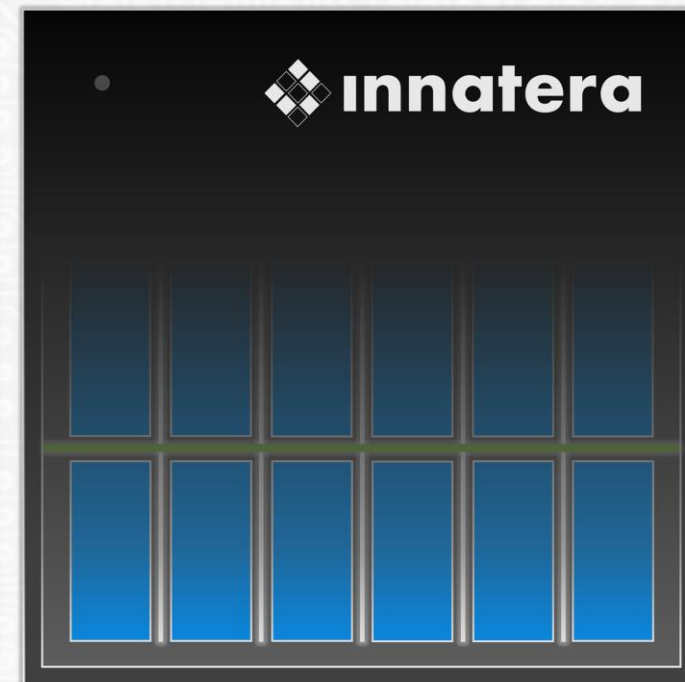
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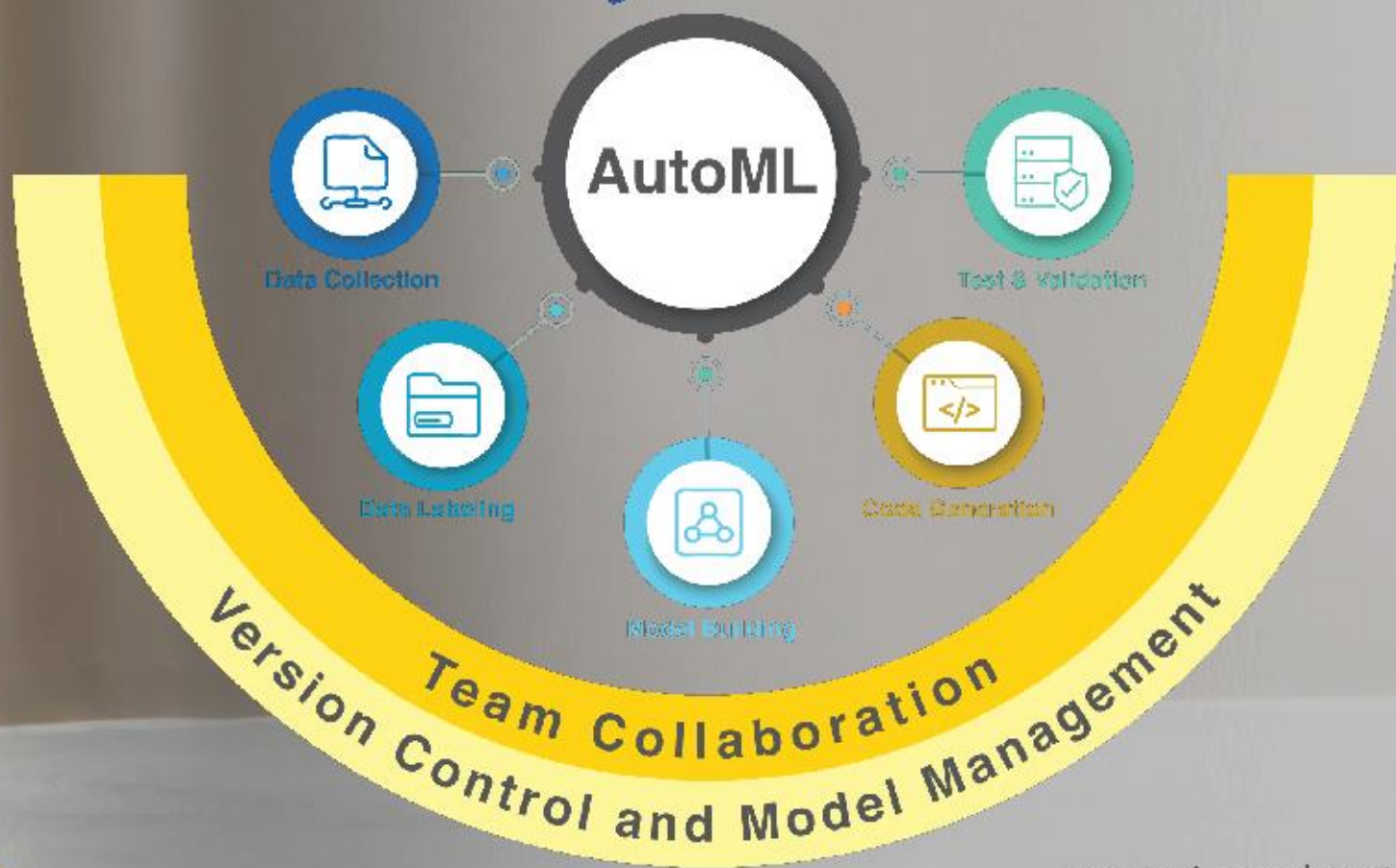


Microsoft

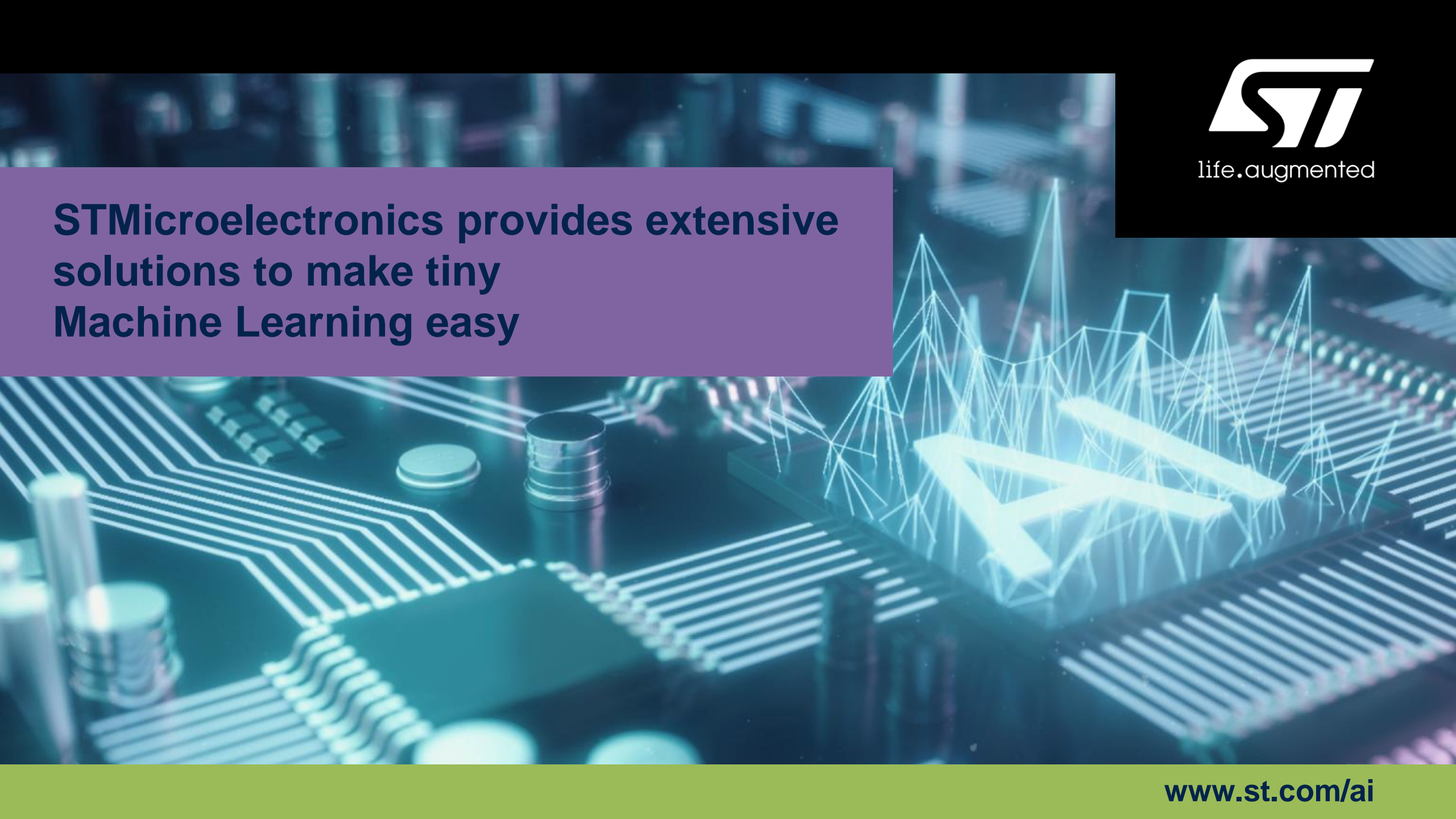
The Right Edge AI Tools Can Make or Break Your Next Smart IoT Product



Analytics Toolkit Suite



sensiml.com/tinyML

The background of the slide is a close-up, high-angle shot of a green printed circuit board (PCB). The board is populated with various electronic components, including several silver cylindrical capacitors and a black integrated circuit (IC) in the lower-left. A complex network of white, glowing lines is superimposed over the board, representing a neural network or data flow. These lines connect various points across the board, with some lines being thicker and more prominent than others. The overall lighting is a cool blue-green, giving it a technological and futuristic feel.

STMicroelectronics provides extensive solutions to make tiny Machine Learning easy



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3.7k members
&
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The tinyML Community

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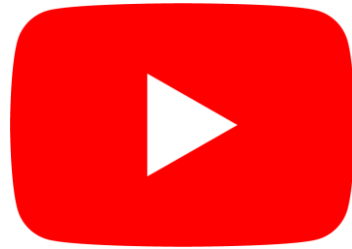
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Reminders

Slides & Videos will be posted
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Please use the Q&A window for your
questions





Host of the Builds Series

Venkat Rangan



Venkat Rangan is a Maker and seasoned engineer with extensive experience in IoT system design and implementation. He is the founder of tinyVision.ai Inc., a hardware and system design consulting company. Venkat previously served as a Director of Engineering at Qualcomm Inc. Venkat holds a MSEE from the University of Cincinnati and a BTech from the Indian Institute of Technology, Roorkee. He is an inventor/co-inventor on over 40 issued patents.



Today's Guest

Pete Warden



Pete is the CEO of Useful Sensors, a startup that builds small, low-cost, and private by design modules that provide machine learning capabilities like presence detection, gesture recognition, and voice interfaces. He was previously CTO of Jetpac, acquired by Google in 2014, a founding member of the TensorFlow open source framework, and technical lead for its on-device team until 2022. He wrote the TinyML book from O'Reilly, teaches at Stanford, as well as pursuing a PhD in Computer Science there.



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