

Partner Presentation

AI for Edge Computing — Smarter AIoT Solution Service for Faster Time to Market

Kev Wang & Joseph Huang, Vecow

Vecow

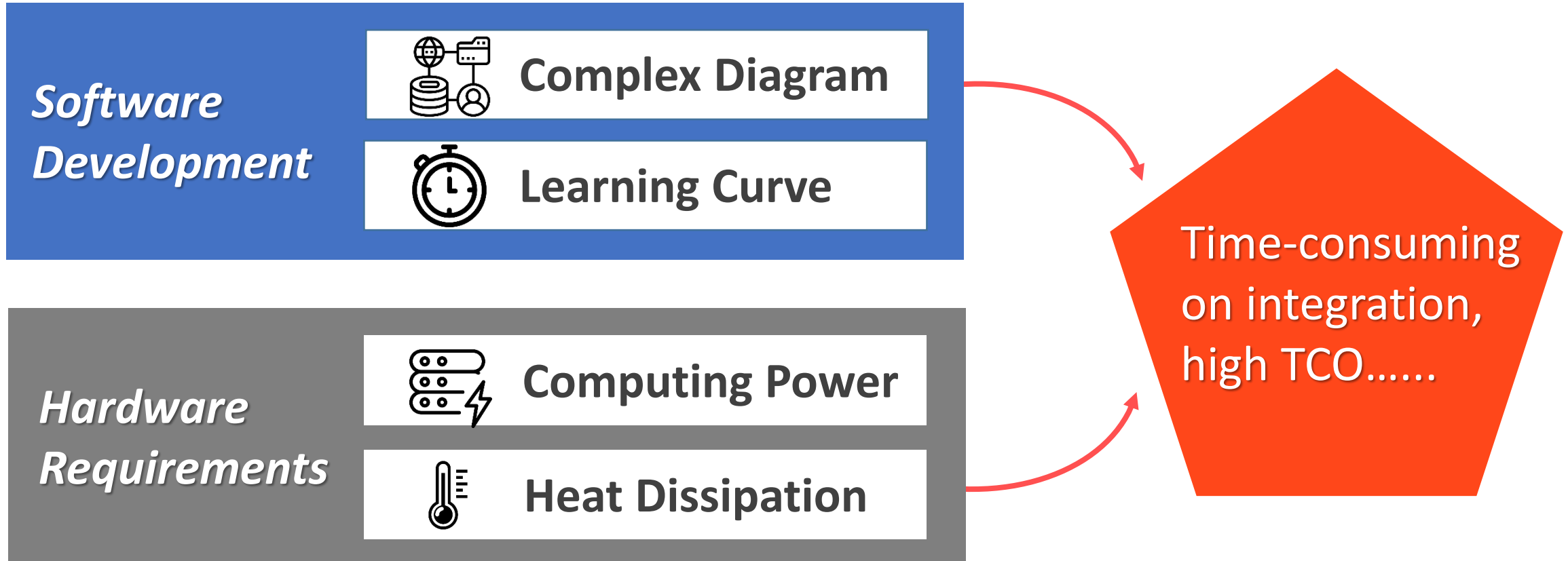
VHub AI Developer



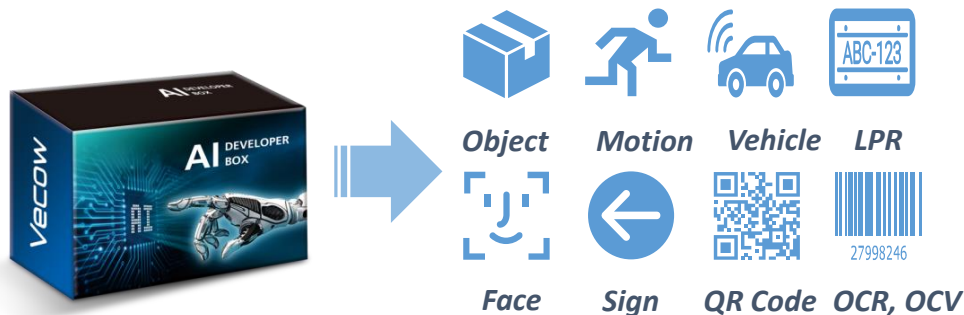
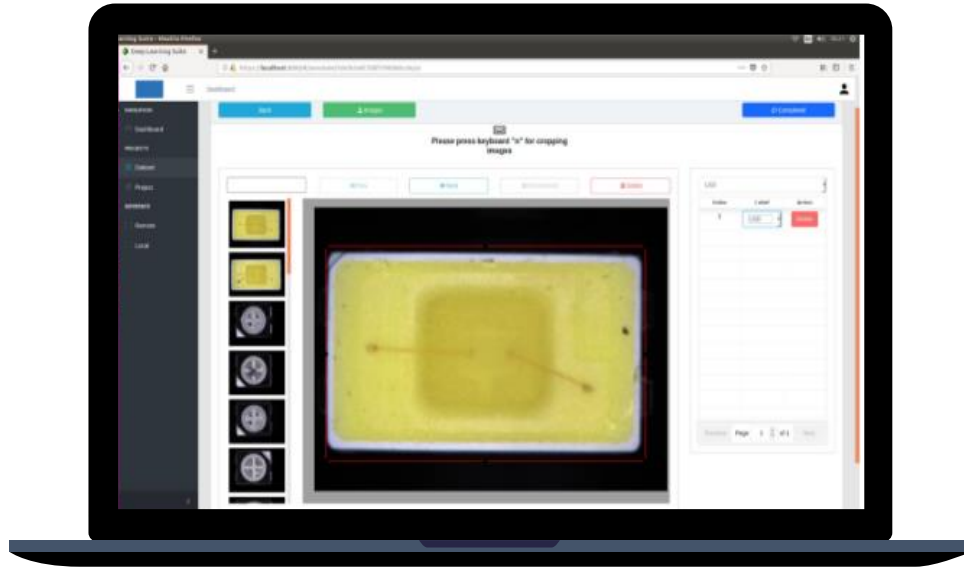
KeV Wang/Product Manager

Problems in the Market

Seeking a one-stop HW+SW integration platform



Smart & Speedy AI Enabler



All-in-one AI Development Kit

Labeling Tool



Training Platforms



AI Accelerator





Inferring Engine





SW+HW One-Stop Solution


AI-Ready Inference System

- Deep Learning**
Object Detection / Facial Recognition /
Object Tracking / Action Detection
- Inferring**
OpenVINO™
- Labeling**
Caffe / Tensor Flow /
MXNet / ONNX
- Training**
Python / MKL / PyQT /
OpenCV / CUDA
- Framework**
Darknet / Imagenet / Alexnet / GoogleNet /
Restnet / Mobilenet
- OS**
Windows / Linux 

Titan Kit


Development Kit


Deployment Kit


Starter Kit




<https://youtu.be/PVXthvwwVLA>

VHub ROS

Key Wang/Product Manager



VHub ROS Solution



- ✓ Support private/public clouds
- ✓ HW+SW ready development kit
- ✓ Suitable in any robot vertical

Software Diagram

Perception SDK

ROS2

- ✓ SLAM
- ✓ Navigation
- ✓ G-mapping



Vision AI

- ✓ 200+ pre-trained models
- ✓ Training & inference engine
- ✓ AI accelerator



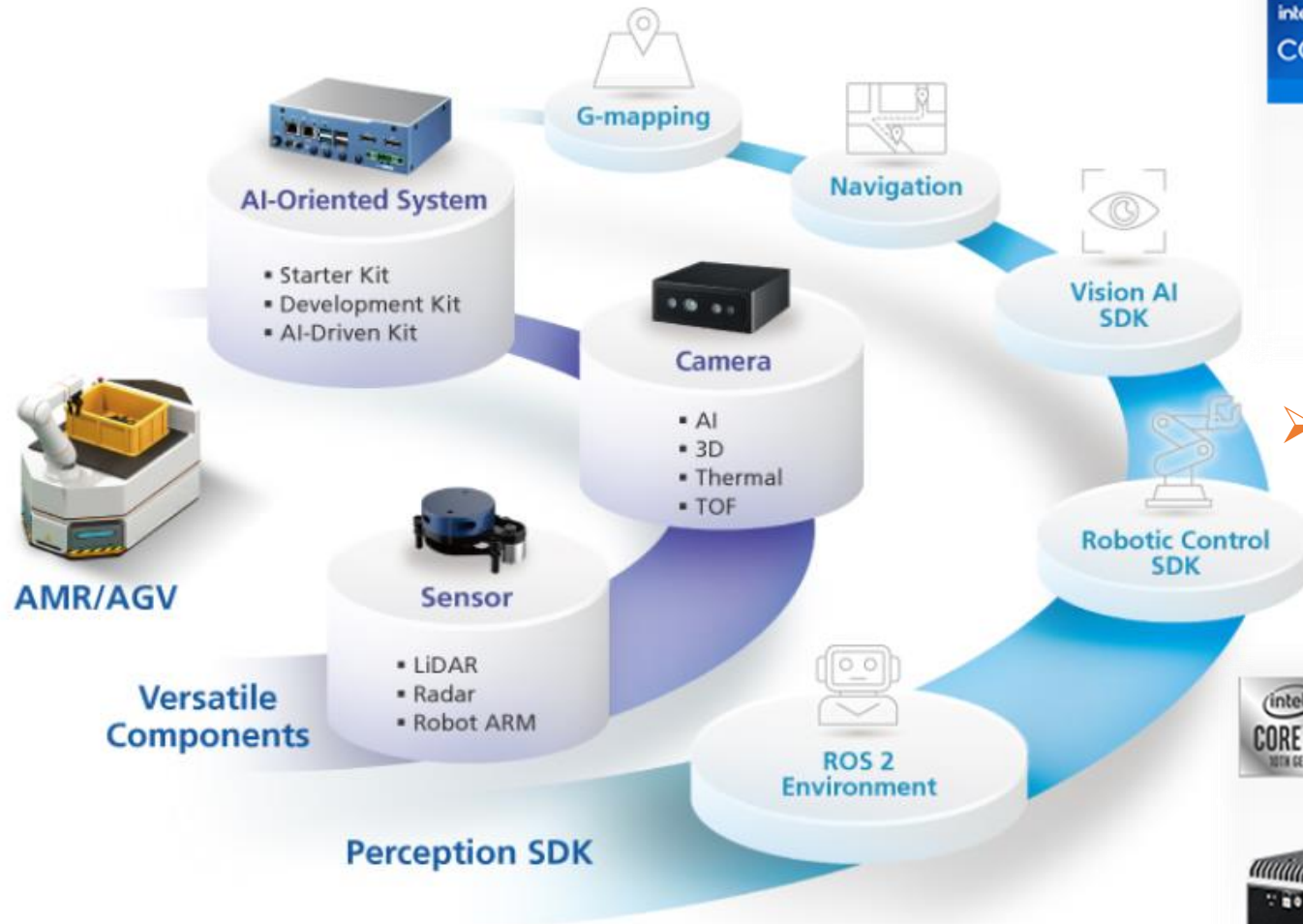
Robotic Control

- ✓ I/O control
- ✓ Motion control
- ✓ Real-time OS support



Intel® Edge Controls for Industrial

AMR Manufacturing Ecosystem



intel CORE i7 intel CORE i5 V-HUB ROBOTIC OS

➤ **Starter Kit:**
SPC-7000/7100
11th Generation Intel® Core™ i7/i5 processor

intel CORE i7 8th Gen intel CORE i3 8th Gen V-HUB ROBOTIC OS

➤ **Development Kit:**
ABP-3000
8th Generation Intel® Core™ i7/i3 processor

intel CORE i7 10TH GEN intel CORE i5 10TH GEN V-HUB ROBOTIC OS

➤ **AI-Driven Kit:**
ECX-2200 PEG
10th Generation Intel® Xeon®/Core™ i7/i5 processor

Smarter AIoT Solution Services

Joseph Huang/Sales Director

One-Stop Edge AI Solution Service

Edge AI Applications



Autonomous Car



Robotic Control



Rolling Stock



Public Surveillance



Traffic Vision



Smart Automation

One-Stop Solutions



Accelerate Platforms



Embedded Systems



Multi-Touch Solutions



Industrial Motherboards



Embedded Peripherals



Design & Manufacturing Services

Vecow Core Competencies

Leading Expertise

- Domain know-how
- Performance driven
- User oriented

Optimized Designs

- Integrated features
- Small form factor
- High reliability

Easy Customization

- Less efforts
- Lower cost
- Faster time-to-market

Flexible Teamwork

- One-stop service
- Top-tier ecosystem
- Win-win partnership

Vecow Core Competencies

Leading Expertise

- IPC domain know-how
- Performance driven
- User-friendly oriented

10GigE



Optimized Designs

- Integrated features
- Compact design/small form factor
- Industrial-grade reliability

Easy Customization

- Less engineering efforts
- Lower total project cost
- Faster time-to-market

Flexible Teamwork

- One-stop service
- World-leading ecosystem
- Win-win partnership



intel
partner
Gold

Windows Embedded

EtherCAT
Technology Group

vmware
PARTNER
TECHNOLOGY
ALLIANCE

aia
advancing VISION+IMAGING
MEMBER



Factory Automation



Service Robot



Smart Retail



Cellular V2X (C-V2X)



- ✓ 11th Generation Intel® Core™ i7/i5 processor (codename Tiger Lake UP3), up to 28W TDP, Intel® Iris® Xe Graphics
- ✓ Compact & fanless design, max -40°C to 85°C operation
- ✓ Dual DisplayPort display, up to 8K resolution
- ✓ 2.5GigE LAN supports Time Sensitive Networking (TSN)
- ✓ DC 9V to 55V Power Input, Ignition Control
- ✓ VHub One-Stop AIoT Solution Service

SPC-7000/7100

Compact Fanless Embedded System

Vecow



Robotic Control



Factory Automation



Smart Retail



Traffic Vision



SPC-6000

Compact Fanless Embedded System

Vecow

- ✓ Quad-core Intel Atom[®] x6425RE processor (codename Elkhart Lake)
- ✓ Cableless & fanless design, -40°C to 70°C operation
- ✓ 2.5GigE LAN supports Intel[®] Time Coordinated Computing (TCC) and Time Sensitive Networking (TSN)
- ✓ DDR4 3200MHz memory, up to 32GB
- ✓ DVI-I and DisplayPort display, up to 4K resolution
- ✓ VHub One-Stop AIoT Solution Service



Factory Automation



Intelligent Vending



ITS



AMR/AGV

5G 25GigE 10GigE



- ✓ 10-core 10th Generation Intel® Xeon®/Core™ i9/i7/i5/i3 processor (codename Comet Lake) + W480E chipset support for up to 95W TDP CPU
- ✓ DC 9V to 50V Power Input with 80V Surge Protection
- ✓ Multiple Ethernet configurations: 10G LAN/ 2.5G LAN/10G SFP+/ 1G SFP+
- ✓ I/O: 9 GigE LAN with 4 PoE+, 6 USB, 4 COM, 2 SSD Tray
- ✓ Expansions: M.2 (Key B, Key E), Mini PCIe, SUMIT A, B

ECX-2000

Workstation-Grade Fanless Embedded System

Vecow

The background features a complex, abstract pattern of thin, overlapping lines in shades of blue, purple, and gold. These lines create a sense of movement and depth. A solid blue rectangular area is positioned on the left side of the image, serving as a backdrop for the text.

Thank you
for watching!

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