



Cost-Efficient, High-Quality AI for Consumer-Grade Smart Home Cameras

Dr. Lin Chen
Chief Scientist
Wyze

Make Great Technology Accessible to Everyone!



- About Wyze
- From detecting people to detecting anything
- Camera as security sensors for home security system
- Make it affordable
- Wyze Copilot and beyond

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About Wyze

- Founded on July 19, 2017. Headquartered in Seattle, WA
- Our Mission
 - Make great technology accessible to everyone
- Our Vision
 - Wyze is a trusted video AI platform that makes life more convenient, fulfilling and joyful
- Our Founding Values
 - Provide "Too Good To Be True" value
 - Be friends with our users



Wyze Cam v1
with \$19.99
in 2017



#CapturedOnWyzeCam and Greatest Hits

#CapturedOnWyzeCam - The Best Moments ▶ Play all



Bear Breaks Into House! | Captured on Wyze Cam

Wyze ✓
49K views • 5 years ago



Heavier Than it Looks! 😬 | Captured on Wyze Cam v2

Wyze ✓
28K views • 5 years ago



A Family of Raccoons! | Captured on Wyze Cam

Wyze ✓
7.6K views • 5 years ago

Animals ▶ Play all



Bear Breaks Into House! | Captured on Wyze Cam

Wyze ✓
49K views • 5 years ago



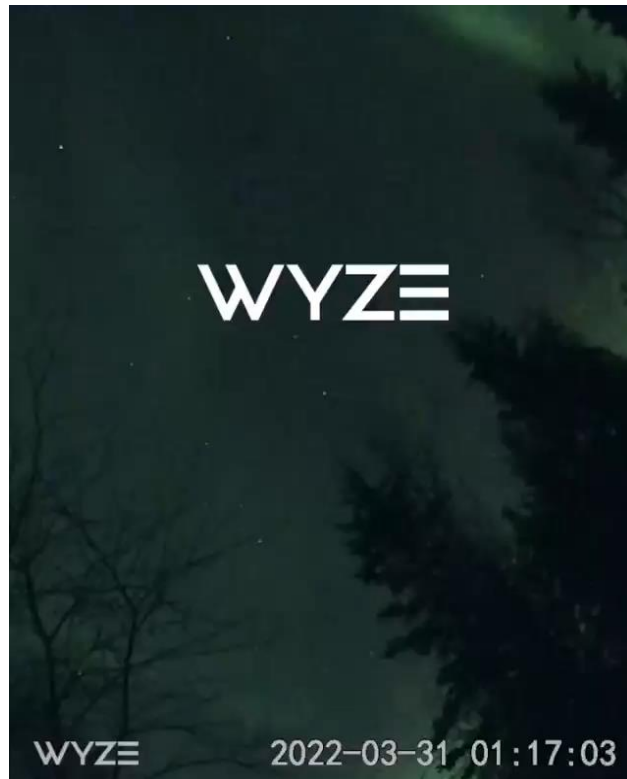
A Porcupine on the Porch! | Captured on Wyze Cam

Wyze ✓
4K views • 5 years ago



Squirrel With A Green Thumb

Wyze ✓
1.4K views • 5 years ago



Wyze Cam Family



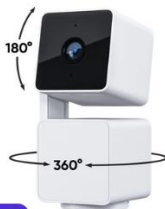
Deal

Wyze Cam v4
From \$35.98



Deal

Wyze Cam OG
From \$24.99



Deal

Wyze Cam Pan v3
From \$39.98



Deal

Wyze Battery Cam Pro
From \$89.98



Deal

Wyze Video Doorbell (Wired)
From \$29.99



Deal

Wyze Cam v3 Pro
From \$44.99



Wyze Cam Floodlight Pro
\$149.99



Deal

Wyze Cam OG
From \$24.99



Sold out

Wyze Cam Pan v2
From \$43.99



Deal

Wyze Cam Floodlight (v1)
From \$79.99



Sold out

Wyze Cam Outdoor v2
From \$63.99



Wyze Cam Outdoor v1
From \$51.99

Self-monitoring security plans. Try it for free!

See what happens around your house anytime and from anywhere.

Cam Plus

For a single camera

\$2.99/mo*

DIY self-monitoring with:

- Event video recording in the cloud
- Person, vehicle, package, and pet detection and alerts
- Glass break, Crying, and barking detection and alerts
- My Day insights show
- **Free trial for new members for 30 days**

[Learn more →](#)

Cam Unlimited

Covers all your cameras

\$9.99/mo

Everything in Cam Plus, and:

- The brand-new multi-cam timeline for live view and events
- Smart Arm/Disarm modes
- Friend Faces detections and unknown faces alerts

[Learn more →](#)

Professional monitoring plans.

Security plans that include live agents and 24/7 emergency dispatch when you need it most.

Cam Protect

For a single camera

Turn your Wyze Cam into an security system

Everything in Cam Plus, plus facial recognition, real-time video verification when there's an alarm, and 24/7 emergency dispatch.

- Works with your Wyze Cam
- 24/7 emergency dispatch

[Learn about Cam Protect](#) →

Wyze Home Monitoring

Covers your entire home

Full alarm system with keypad and sensors

- 24/7 real person agent response with emergency dispatch
- Environmental monitoring for water leak and climate change
- One free license of Cam Plus and Sprinkler Plus included

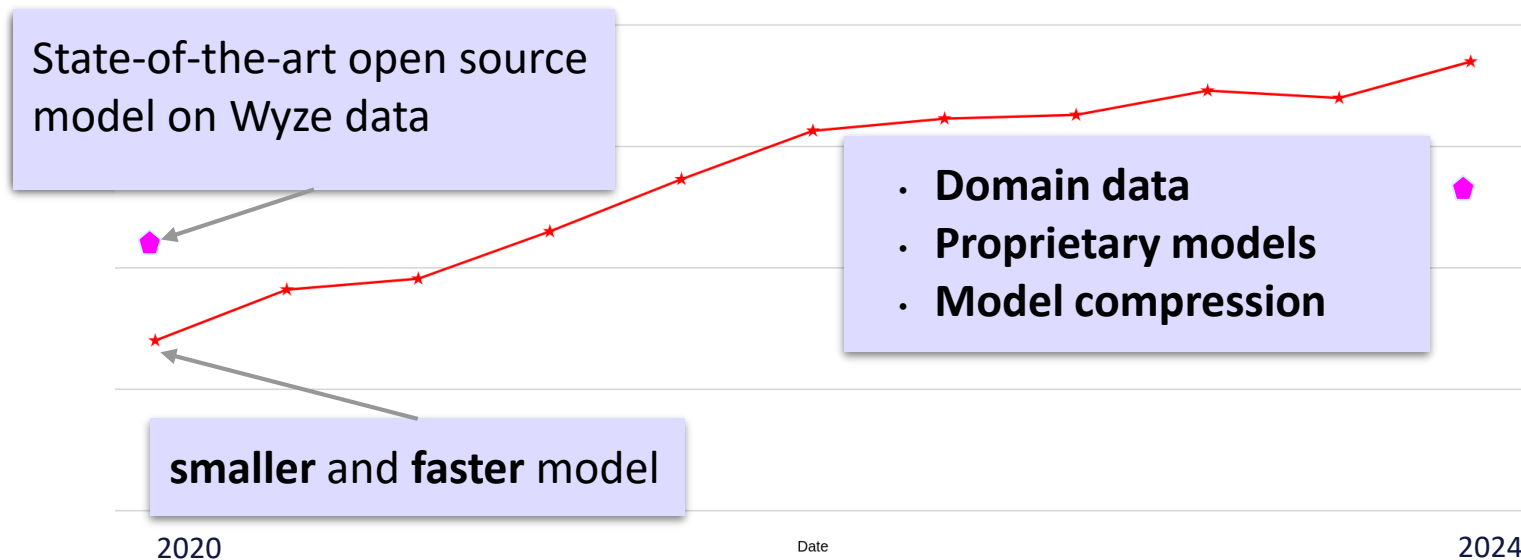
[Learn about Wyze Home Monitoring](#) →

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The Evolution of Wyze Person Detection

AP vs. Date



Wyze AI Flywheel



Amazon
CloudWatch



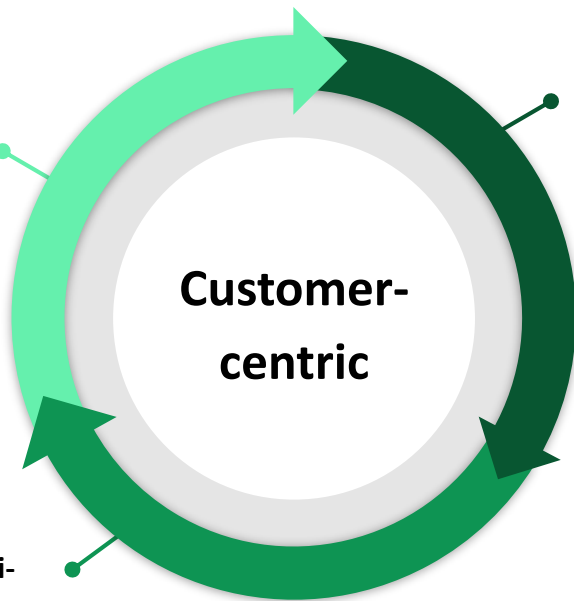
AWS ECS



Jenkins

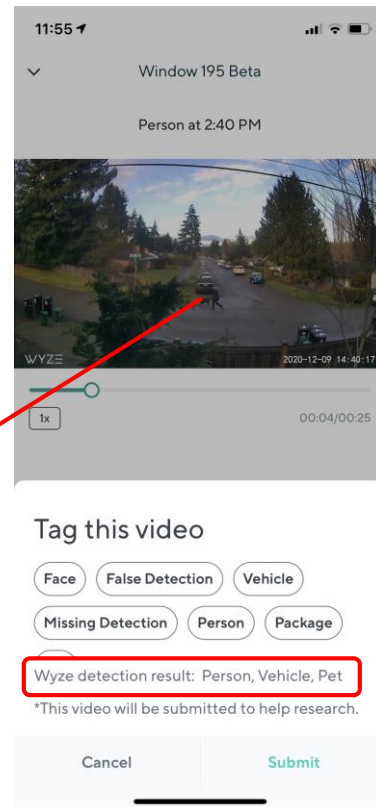
Service
Updated model will be
automatically deployed
to answer feedback
and keep improving

Model
AI model semi-
automatically updates
with user feedback



**User
Feedback**

Users are actively
giving us feedback
on our services



Expand to More Categories

OBJECT DETECTIONS

Person



Friendly Faces



Pet



Vehicle



Package

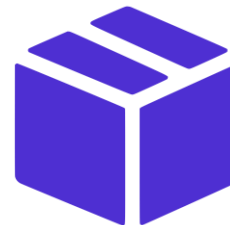


AUDIO DETECTIONS

Crying



Meowina



Adding More Categories Becomes Challenging

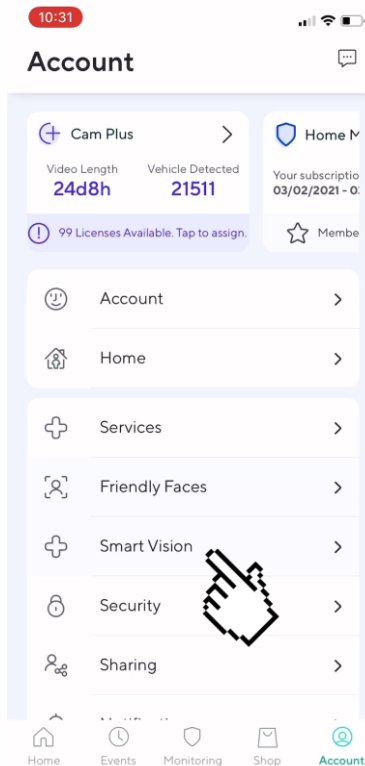


Wyze Smart Vision - Solving the Long-tail Problem

- First consumer-grade AI platform engineered to democratize AI model building
- Powered by few-shot learning with just a few examples of what you want to detect
- Explicit user feedback is used to improve the model, e.g., by adding more examples. Automatic approach can increase the usability
- Currently, running on cloud only. It is an interesting topic to develop a hybrid model using edge, cloud, and app
- It is seamlessly integrated within the Wyze App and requires nothing more than a Wyze Cam



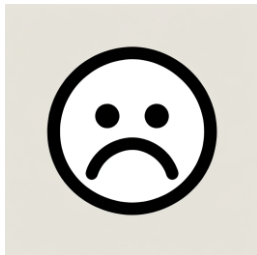
Demo: Smart Vision in Action



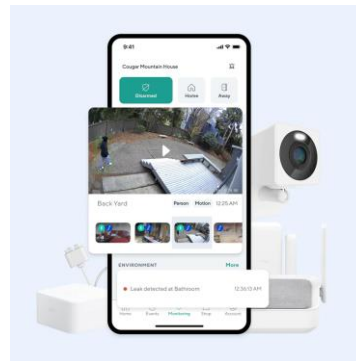
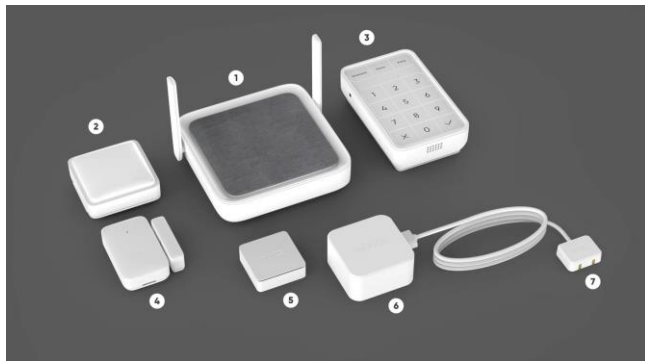
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Motion Sensors are Literally "Blind" and Cannot Really "See"

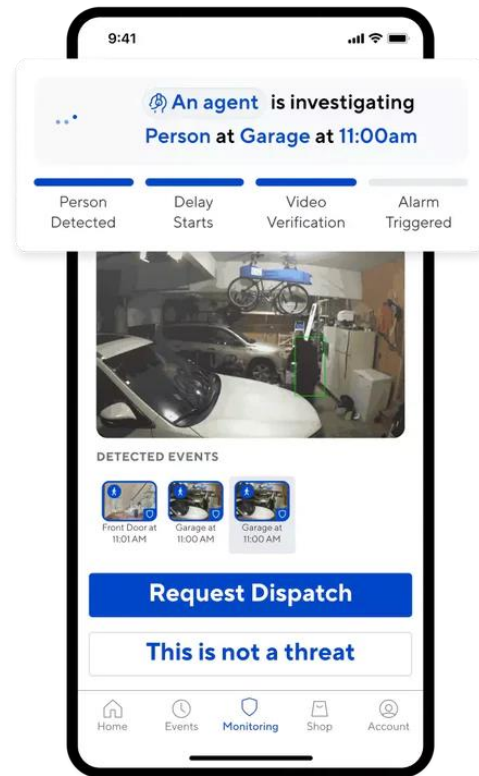


- **False alarm:** lots of movements can trigger motion sensors
- **Lack of context:** you can hardly tell what triggered the motion

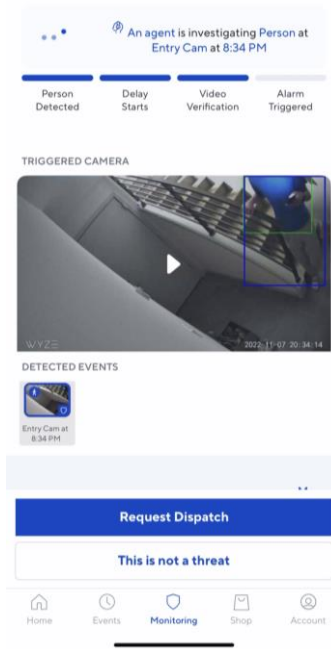


AI-Powered Camera as “Super Sensor”

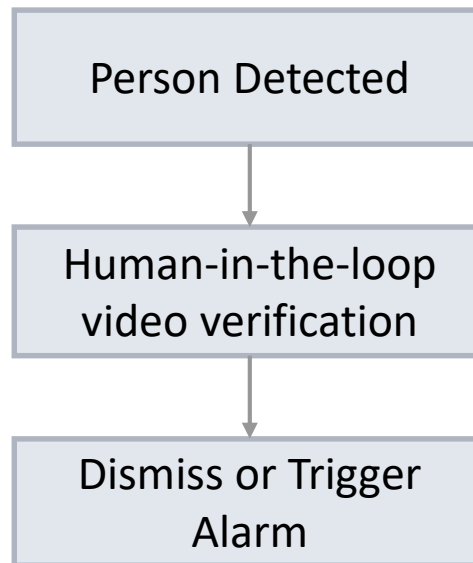
- Person detection is **more precise** to set off the alarm
- Video provides **better context** for human verification
- It is also **more intuitive** to install, as you can see what exactly the camera is “seeing”



Cameras as “Super Sensors”



First consumer-grade professional monitoring service with human-in-the-loop video verification



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Make the Impossible Combination Possible!

15,000-Year
Monthly
Video
Duration

\$2.99
Monthly
Subscription

1.5 ms
Inference
Latency



Deal

- Highly optimized cloud models
- Highly optimized on edge models
- Edge-cloud collaboration

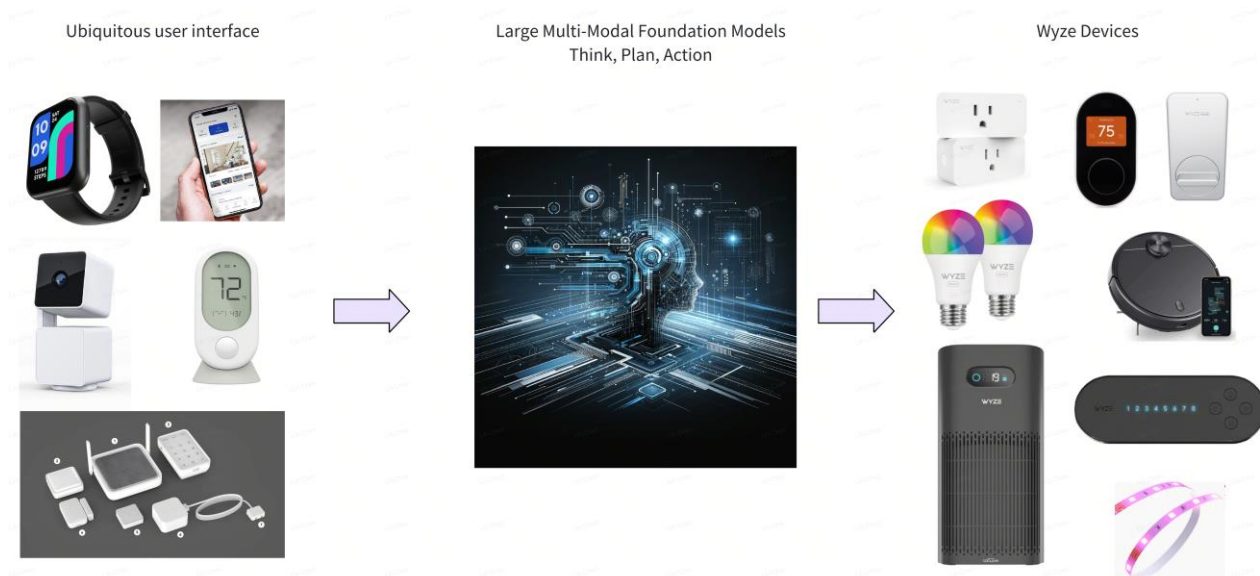
WYZE

Wyze Cam v3
From \$25.98

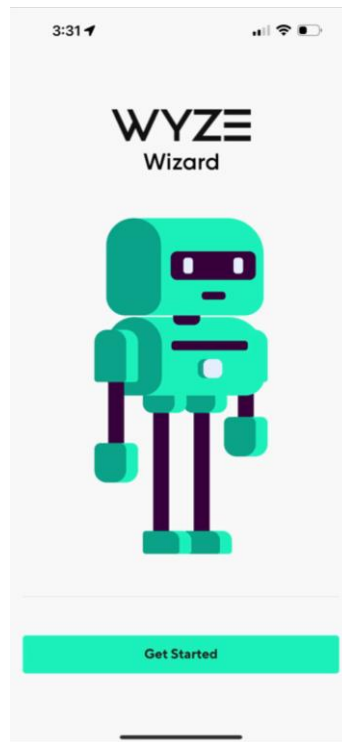
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A smart, convenient, reliable, personalized, trustworthy, always-on assistant for every family



Demo: Wyze Copilot



Conclusion & Takeaways

- **Wyze AI flywheel** sets the mechanism to continuously evolve Wyze AI with user feedback
- **Wyze Smart Vision** allows users to build their own AI skills with Wyze Cam at ease
- **Edge-Cloud Collaboration** with highly optimized Cloud AI and Edge AI provides the “**too good to be true**” value: best-in-class accuracy with very affordable cost
- **Large multi-modal foundation models** are going to revolutionize video security and smart home experience

Thank You!



We are hiring!
wyze.com/careers

