we exist to get everyone home safely.

seeingmachines

Contents

trusted partner

World-renowned automotive brands trust Seeing Machines, evident in our technology's presence in over 2 million cars globally across seven programs with the likes of General Motors, Ford, BMW and Mercedes Benz.

2.2m+
production volumes at 30 June 2024

11
OEM engagements

7
programs in production

18
awarded programs

✓ delivering success

As the automotive industry accelerates towards more advanced levels of driving automation and immersive digital cockpits, vehicles are poised to gain an unprecedented understanding of their occupants. This vision is no longer on the horizon; it's unfolding before our eyes.

Seeing Machines stands at the forefront of this transformation, offering robust AI-powered Driver and Occupant Monitoring System (interior sensing) software solutions that combine cutting-edge technology with world-leading data insights to deliver vital safety outcomes and an enhanced user experience with industry leading convenience features for all vehicle occupants.

We're partnering with leading global OEMs and Tier 1 suppliers, reinventing the in-vehicle experience for drivers and passengers alike. Our proactive approach meets consumers' growing needs, navigates intricate safety regulations, and sets a high bar for future automotive innovations.

With Seeing Machines, you're choosing a partner who defines success as delivering every program into high quality production on time, with the ultimate goal of getting everyone home safely.

★ ★ ★ ★ ★

seeing stars

Ahead of regulatory curves, Seeing Machines is committed to helping customers achieve the highest possible NCAP safety ratings with our best-in-class solutions. Working closely with global safety bodies, regulators, and law makers, our team has informed DMS protocols and regulatory policies to achieve practical and effective safety outcomes, with the ultimate goal of fewer traffic crashes, injuries, and deaths.

Our investments and involvement in these processes and the resulting Seeing Machines technology alignment with deployed vehicle safety protocols and rule making lowers our customers' risks in achieving desired safety ratings, regulatory compliance, and successful vehicle level homologation.

the seeing machines advantage

Success in the automotive industry requires meticulous system level design, integration of complex systems, hardware components, and software to function in harmony, comply with the highest safety standards and elevate the user experience. Seeing Machines helps OEMs and Tier-1's optimize these multi-faceted systems by leveraging our experience and systems level expertise.

- **human factors leadership**

  We solve critical transport safety problems with our human behavioral research, unique among our peers. This work shapes standards and propels regulatory bodies towards concept development that ensure real-world effectiveness, and timely deployment.

- **industry leading design**

  Our AI Vision offering is bolstered with industry leading machine learning architectures at the deep embedded edge and enabled through our vast, high quality, data sets. We merge our unprecedented 17+ billion kilometres of naturalistic driving data with the industry's most sophisticated true to life, end to end system informed, synthetically generated data. Our digital engineering processes are designed to specifically meet the demand for exponential increases in the number of interior monitoring features at affordable development cost while assuring that increasingly complex transport safety rating and regulation schemes are satisfied.

- **systems level expertise**

  For success, our teams work across disciplines to co-design algorithms with other aspects of the full system. Our system-wide proficiency extends across:

  - Human Factors science and application

  - Data collection design, analysis, and truthing

  - Synthetic data realism taxonomy and generation

  - 2D and 3D optical paths (including sensor selection, lens design, and illumination options/design/ configuration, cover-glass design, and camera packaging/location)

  - Holistic optical path specification (OMSiQ)

  - Embedded processing options/ optimization (CPU, NPU, GPU, DSP)

  - Advanced machine learned and heuristic software algorithms

  - Functional Safety, Cybersecurity and ASPICE compliance

- **unparalleled customer support**

  Our ability to adapt and innovate mid-program, sets us apart. Demonstrated in these examples that are now successfully in production:

  i. Flexible solutions for every challenge: When one OEM customer sought to incorporate phone detection capability into their Chinese GB/T charging system, they faced a daunting mid-program challenge: limited computational bandwidth. Leveraging our expertise, we optimized our algorithm to achieve the expected performance level across all relevant product variants, despite the stringent computational limitations.

  ii. Optimizing performance through precision: Mid-program our European OEM customer approached us with new, unique car constraints requiring three different optical paths. Our ability to customize optical solutions ensured seamless integration, regardless of the vehicle's design limitations and the program launched on time within budget.

- **flexible integration**

  Our driver and occupant monitoring software is supported on all modern chip platforms from the leading semiconductor vendors in the automotive industry (e.g. Qualcomm, Texas Instruments, AMD, Renesas, Omnivision, Ambarella, NVIDIA). We support all the major operating systems for automotive applications (e.g. QNX Neutrino, GHS Integrity, Android Linux).

- **cost optimization**

  We partner with our customers from an early stage to analyse system level bottlenecks and optimize efficiently to deliver overall lower cost solutions that are ideally matched to the target packaging, power and performance requirements of each program.
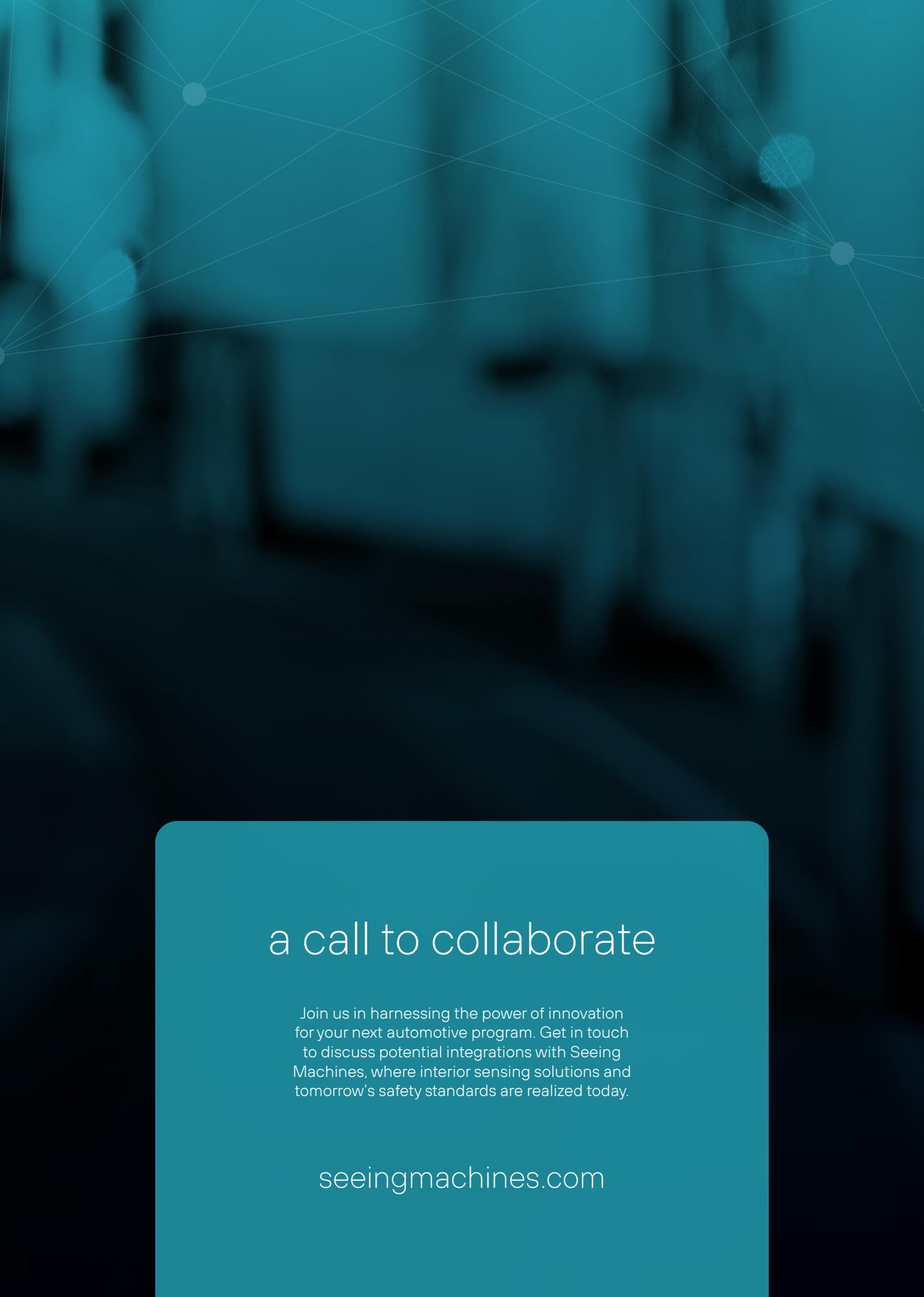
a call to collaborate

Join us in harnessing the power of innovation for your next automotive program. Get in touch to discuss potential integrations with Seeing Machines, where interior sensing solutions and tomorrow's safety standards are realized today.

seeingmachines.com