



Swaayatt Robots

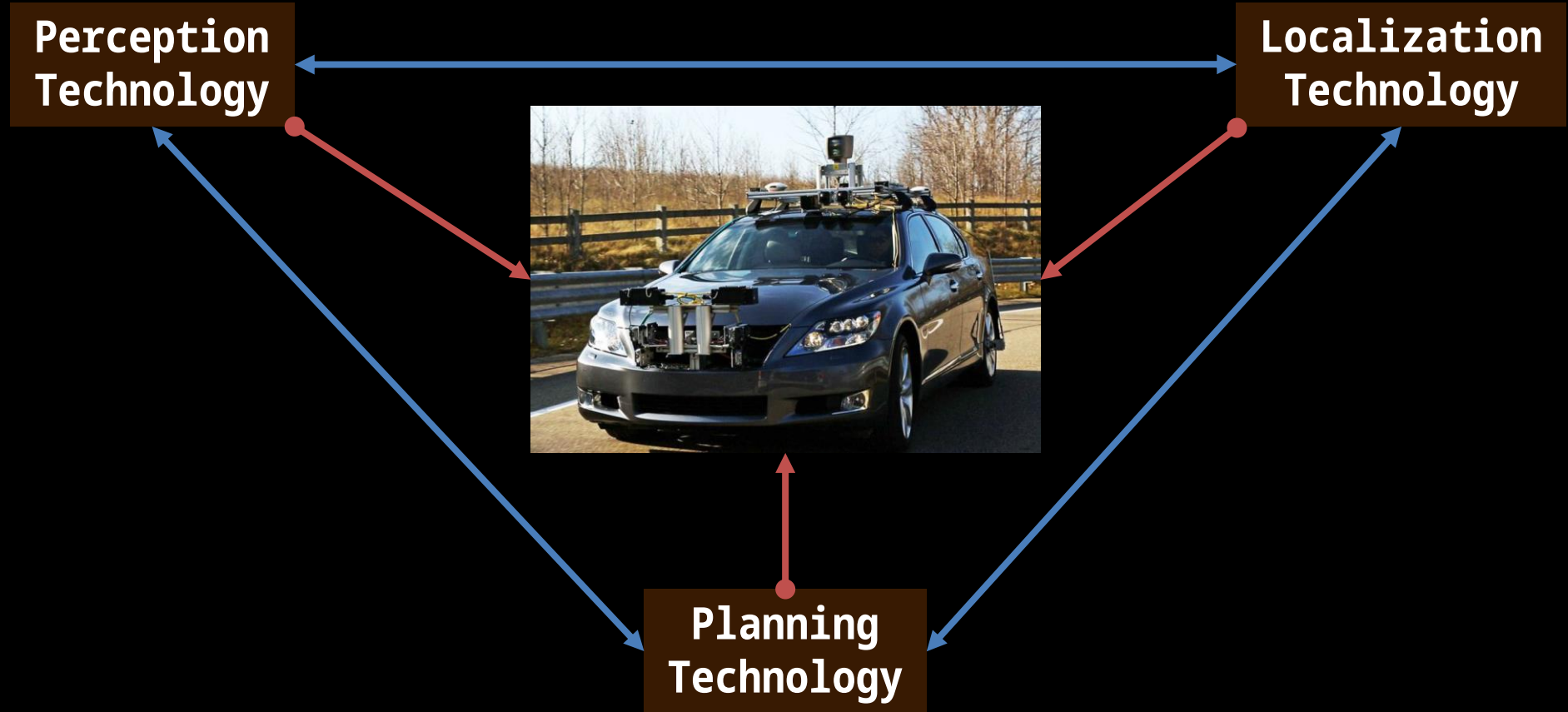
Autonomous Driving In Stochastic Traffic

Sanjeev Sharma, Founder & CEO

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Autonomous Driving



Perception Technology

GFPI: Smaller is Better

SOTA: State-Of-The-Art

TASK

- Obstacles Detection:
- Semantic Segmentation:
- LiDAR Segmentation:
- Lane Markers Detection:
- Free Space Detection:

SOTA

40 - 650	GFPI
100 - 400	GFPI
> 100	GFPI
> 75	GFPI
> 100	GFPI

SWAAYATT

< 25	GFPI
< 17	GFPI
< 15	GFPI
< 14	GFPI
< 15	GFPI

ADVANTAGE

60% - 2500%
488% - 2250%
> 566%
> 435%
> 566%

GFPI: Giga Flops Per Image

1 GFPI = One Billion Floating Point Computations Per Image

Planning Technology

CAPABILITIES

- Traffic Dynamics
- Motion Planning
- Handles tight stochastic environments
- Handles stochastic multi-agent negotiations
- High-speed navigation in cluttered environments

SOTA

SIMPLER &
STRUCTURED
~25 Hz

NO

NO

NO

SWAAYATT

COMPLEX &
STOCHASTIC
~200+ Hz

YES

YES

YES

ADVANTAGE

MORE CAPABLE

EFFICIENT
FASTER REACTION
SAFER

SAFER

SAFER

SOTA POOL

WAYMO (ALPHABET), APTIV, AURORA TECH, ZOOX (AMAZON), MOBILEYE (INTEL), NVIDIA, ARGO AI (VOLKSWAGEN | FORD), CRUISE AUTOMATION (GENERAL MOTORS | MICROSOFT), IKE TRUCKS (NURO), TORC ROBOTICS (DAIMLER), TESLA MOTORS

Key USPs | Overall Benefits

For Autonomous Driving and ADAS

📦 Safer Operations:

Algorithms able to deal with stochasticity

📦 Cost Efficiency:

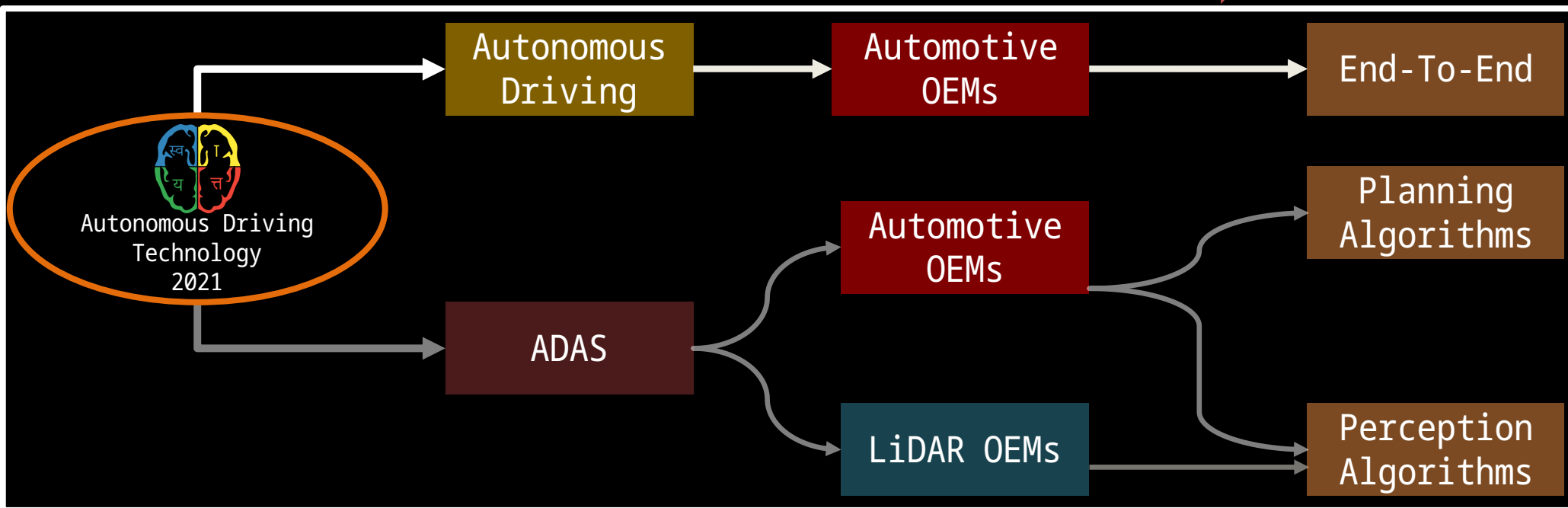
Lesser computational, energy and sensory requirements

📦 Scalability:

Autonomous Driving without High Fidelity Maps

One of the 3 companies in the world that can do this

Go To Market



Other Revenue Streams

- Data As A Service
- ADAS Technology
- MAPs

Traction: Collaboration / PoC Raised



PoC Raised, September 2020



Potential Collaboration (Ongoing)

Reseller Agreement
R&D Support in term of LiDARs



India Integrator, December 2020

Technology Demo: [Here](#)

Team



Sanjeev Sharma
Founder & CEO

- IIT Roorkee (India); University of Alberta (Canada); Ariel University (Israel)
- 12 Years Research in Autonomous Navigation
- 51 Most Impactful Smart Cities Leaders (Global Recognition, 2019)
- Autonomous driving research recognized globally

- IIT Kharagpur (BTech), MIT Sloan (MBA)
- 5+ Years: Apple, McKinsey, Keystone Strategy, P&G, HP etc (USA)



Priyanka Chaturvedi
(Part Time)

Advisers



Jan Kuenne
Senior Consultant, EDG

5 Other Team Members

Competition

With LiDAR/RADAR



TESLA



BOSCH



WAYMO



drive.ai

• APTIV •



Off-Road Vehicles

On-Road Vehicles



Without LiDAR/RADAR

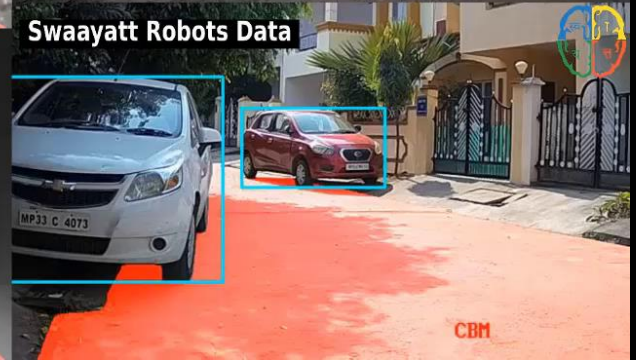
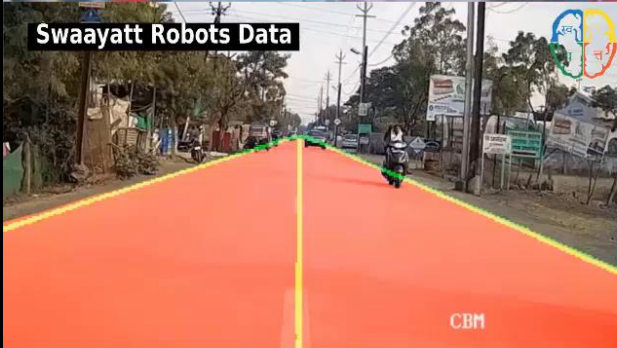
Swaayatt's Tech Market Potential

Market	Value		Swaayatt
Autonomous Driving	\$12 Trillion	(2030)	~ 25%
India Autonomous Trucking	\$600 Billion	(2040)	~ 75%
Autonomy Global Defense	\$2+ Trillion	(2030)	-
Autonomy Indian Defense	\$200+ Billion	(2035)	~ 80%
ADAS	\$100+ Billion	(2030)	~ 10%
Automatic Data Labelling	\$100+ Billion	(2025)	~ 5%

Funding

- ✦ \$9.5 M (INR 70 Cr); Valuation \$95 M (INR 700 Cr)
- ✦ To achieve technology and business objectives, and prepare for series A in 1.5 years
- ✦ Series-A Round: \$127.5 M; Valuation \$850 M
- ✦ Distribution
 - Team 20%
 - R&D 25%
 - Hardware Infrastructure 14%
 - Prototype Production 17%
 - Operations 12%
 - Miscellaneous 2%

Traction: PoC Tech Demo





Thank You!