

ASML

Will Artificial Intelligence Mark the Fall of Society?

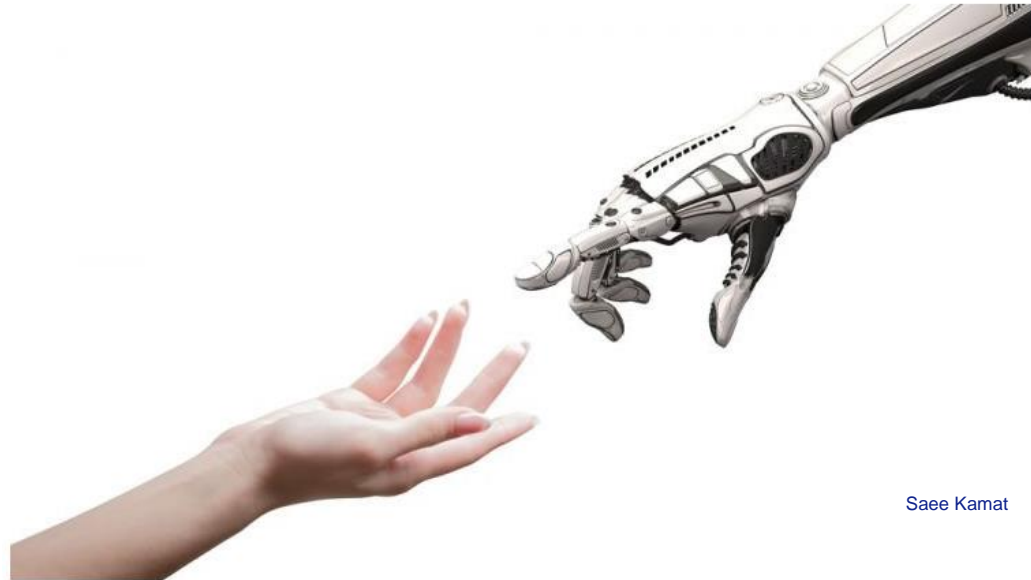
an assessment of the social and economic implications of AI-driven technologies

Saee Kamat | Design Engineer | ASML

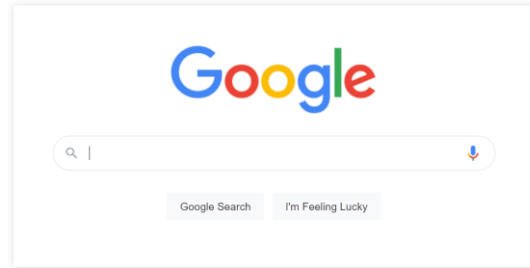
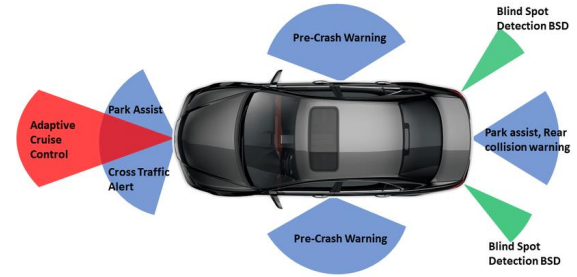


Agenda

- AI for Social Good
- AI at ASML
- Threats of AI
- Aligning Goals of AI and Society



The New Normal



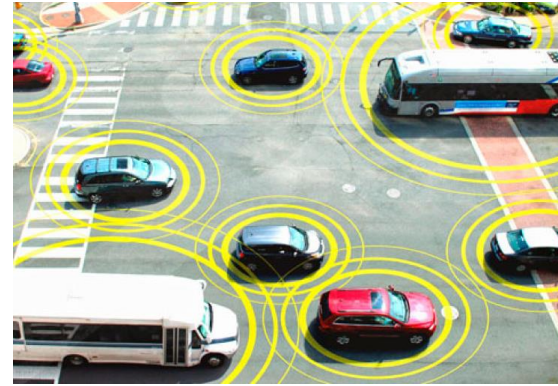
Artificial Intelligence Market Report Scope

Report Attribute	Details
Market size value in 2021	USD 93.53 billion
Revenue forecast in 2028	USD 997.77 billion
Growth Rate	CAGR of 40.2% from 2021 to 2028
Base year for estimation	2020
Historical data	2017 - 2019
Forecast period	2021 - 2028
Quantitative units	Revenue in USD billion and CAGR from 2021 to 2028
Report coverage	Revenue forecast, company ranking, competitive landscape, growth factors, and trends
Segments covered	Solution, technology, end use, region
Regional scope	North America; Europe; Asia Pacific; South America; MEA
Country scope	U.S.; Canada; Mexico; Germany; U.K.; China; Japan; India; Brazil
Key companies profiled	Advanced Micro Devices; AiCure; Arm Limited; Atomwise, Inc.; Ayasdi AI LLC; Baidu, Inc.; Clarifai, Inc; Cyrcadia Health; Enlitic, Inc.; Google LLC; H2O.ai.; HyperVerge, Inc.; International Business Machines Corporation; IBM Watson Health; Intel Corporation; Iris.ai AS.; Lifegraph; Microsoft; NVIDIA Corporation; Sensely, Inc.; Zebra Medical Vision, Inc.

Source: <https://www.grandviewresearch.com/industry-analysis/artificial-intelligence-ai-market>



Healthcare



Transportation

AI at ASML

- Software is the key differentiator
- Combination of Physics and ML helps to
 - optimize production
 - detect defects
 - make corrections quickly and accurately
- AI helps to
 - increase customer value
 - reduce costs
 - reduce time-to-market





The development of full artificial intelligence could spell the end of the human race.

— *Stephen Hawking* —



With artificial intelligence we are summoning the demon.

— *Elon Musk* —

1. Inability to explain Decision-Making Logic



Incomplete Training Data



Hidden Biases

2. Evolving Nature of AI Programs



“take me the to the airport as fast as possible”

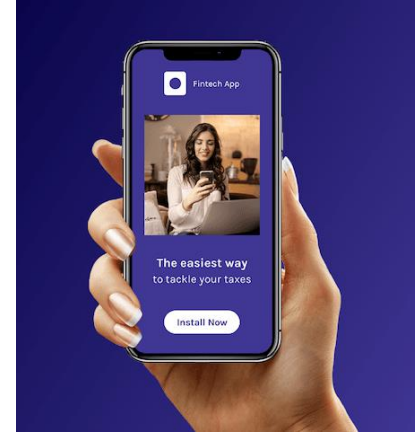
3. Digital Divide & Unemployment



Blue-Collar Jobs



White-Collar Jobs



Financial Services

Moving Forward: Building Trustworthy & Human-Centered AI

Organization for Economic Co-operation & Development (OECD) Guidelines



Inclusive & Equitable Growth



Transparency & Explainability



Accountability

Moving Forward: National Policies to promote Trustworthy AI

Organization for Economic Co-operation & Development (OECD) Guidelines



Investment in AI R&D



Skill Building



Explainability



Algorithmic Auditing



Data Privacy



Data Inclusivity

Thank You for Joining!



1. [Artificial Intelligence Ethics Guidelines for Developers and Users](#)
2. [Artificial Intelligence in Society | OECD](#)
3. [Socially Responsible AI Algorithms: Issues, Purposes, and Challenges](#)
4. [The Business of Artificial Intelligence](#)
5. [The One Hundred Year Study on Artificial Intelligence](#)
6. [ASML Develops Virtual Metrology Technology for Semiconductor Manufacturing with Machine Learning](#)

The image features the ASML logo in a bold, dark blue, sans-serif font on the left side. The background is a gradient of light blue, with several large, overlapping, semi-transparent wave-like shapes on the left. On the right side, there are several thin, white, wavy lines that create a sense of motion and depth, extending from the center towards the right edge.

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