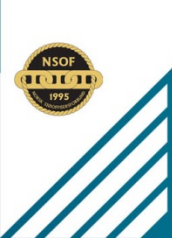


# UBEMANNET SKIP

TRUSSEL ELLER MULIGHET FOR SJØFOLK?



**JA!**

**BEGGE DELER!**





SCIENCE

# Toyota to Finance \$50 Million 'Intelligent' Car Project

By JOHN MARKOFF SEPT. 4, 2015



Gill Pratt is leaving his position at the Defense Advanced Research Projects Agency to direct Toyota's artificial intelligence effort.  
Chip Somodevilla/Getty Images

The [Toyota Motor Corporation](#) announced on Friday an ambitious \$50 million robotics and artificial intelligence research effort, in collaboration with [Stanford University](#) and the [Massachusetts Institute of Technology](#), to develop “intelligent” rather than self-driving cars.

The distinction is a significant one, according to Gill Pratt, a prominent American roboticist, who has left his position at the [Defense Advanced Research Projects Agency](#) of the Pentagon to direct the new effort.

Rather than compete with companies like Google and Tesla, which are developing cars that drive without human intervention, [Toyota](#) will focus its effort on using advances in A.I. technologies to make humans better drivers.

Dr. Pratt described the two approaches as “parallel” and “serial” autonomy. In layman terms, parallel means the machine



«Rather than compete with companies like Google and Tesla, which are developing cars that can drive without human intervention, Toyota will focus its effort on using advances in A.I. technologies to make humans better drivers.»



# LEVEL OF AUTONOMY (SHERIDANS SCALE)

- 1. Computer offers no assistance; human does it all**
- 2. Computer offers a complete set of action alternatives**
- 3. Computer narrows the selection down to a few choices**
- 4. Computer suggests a single action**
- 5. Computer executes that action if human approves**
- 6. Computer allows the human limited time to veto before automatic execution**
- 7. Computer executes automatically then necessarily informs the human**
- 8. Computer informs human after automatic execution only if human asks**
- 9. Computer informs human after automatic execution only if it decides to**
- 10. Computer decides everything and acts autonomously, ignoring the human**

## Maritime «grader av autonomi»

Tidvis ubemannet bro

Ubemannet under sjøreisen med fjernkontroll (los til los)

Ubemannet under sjøreisen med overvåkning og mulighet til å intervenere

Autonom sjøreise, fjernkontroll ved kysten

Autonom sjøreise, overvåkning ved kysten

Autonom drift



# UTFORDRINGER

- **Masse i bevegelse**
- **Sensorer**
- **Uregulert virksomhet**
- **Safety**
- **Security**
- **Vedlikehold**
- **(Juridiske forhold)**

