# Autonomous Driving



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**CS489** 

Term Paper Presentation

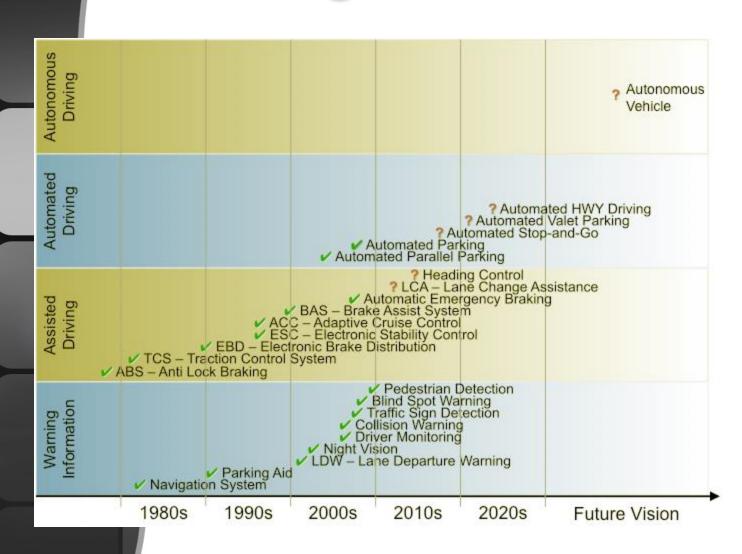
## Overview and Purpose

- Cars driving themselves using computers
- Uses sensors, GPS mapping, and other

techniques

- Reduce traffic violations
- Reduce accidents
- Eliminate human error (i.e. bad parking)
- Gives time for other activities
- Could eventually make shipping more efficient

### Progression



#### The Boss

Created by students at Carnegie Mellon

University

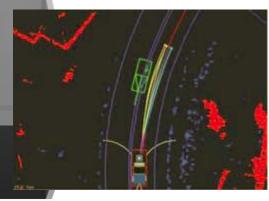
Winner of the annual

Urban Challenge, hosted

by Defense Advanced

Research Projects Agency (DARPA)





#### Ethical Issues

- Al makes life-or-death decisions
- Legislation still developing
- Current collisions are based on technical (human) failure or environmental conditions
- Possible Solutions
  - Special insurance policies
  - Mandatory data recorders for vehicles
  - Fail safe strategies
  - Extensive case-analysis and mock trials

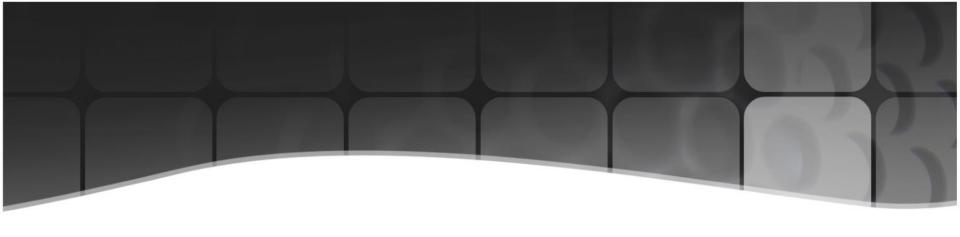
#### Pros and Cons

- Pros
  - Eliminate human error
  - Controlling traffic
  - Commercial driving (i.e. shipping)
- Cons
  - Jurisdiction and liability
  - Added costs
  - Trusting AI with life-and-death
  - Loss of jobs

#### Sources

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# Questions?