#### Introduction to Robotics

#### CSCI/ATRI 4530/6530

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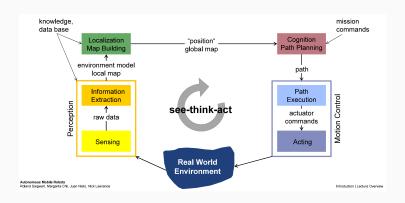
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# A quick recap

#### **Overview of Autonomous Robots**

#### Sense-compute-move cycle



### **Brief history of Robotics**

Who coined the term "Robotics"?

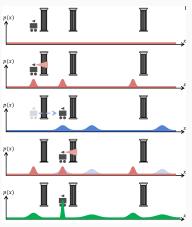
### **Brief history of Robotics**

- · Who coined the term "Robotics"?
- · Which is the first general purpose mobile robot?

#### Probablistic localization

#### Localize the robot in a given map dealing with uncertain data

Updates its belief state (fusing information from various sensors - laser scanner, wheel odometer, etc.)



#### **Basics of sensors**

See the (Lecture 2) attached slides from EdX

# Robot Operating Systems (ROS)

#### **ROS**

See the attached slides for ROS

## Wheeled robot kinematics

#### Wheeled robot kinematics

See the attached slides from EdX

## For the next class

#### Next class - Monday 08/20/2018

- ROS installation, configuration, and setup
- · Wheeled robot kinematics continued