

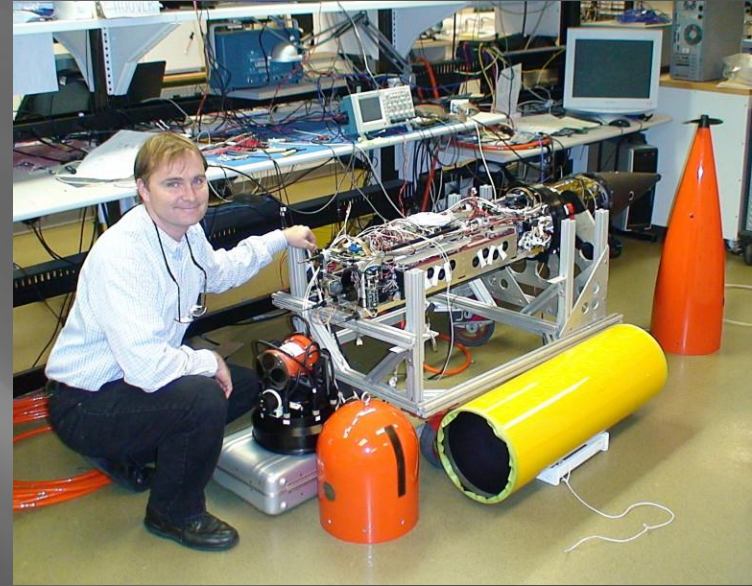
Bear Robotics

From Deep Oceans to Mars ©

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Exploring Deep Ocean Trenches

- ▣ Challenges: autonomy, buoyancy, mobility, power
- ▣ Rewards: Discover new life
- ▣ MBARI (Monterey Bay Research Institute)



Working the Land

- ▣ Challenges:
autonomy, reliability,
safety, cost
- ▣ Rewards: Fewer
accidents, greater
productivity
- ▣ Caterpillar



Protecting our Troops

- ▣ Challenges:
autonomy, power,
miniaturization
- ▣ Rewards: Save lives,
Take important
pictures
- ▣ DARPA



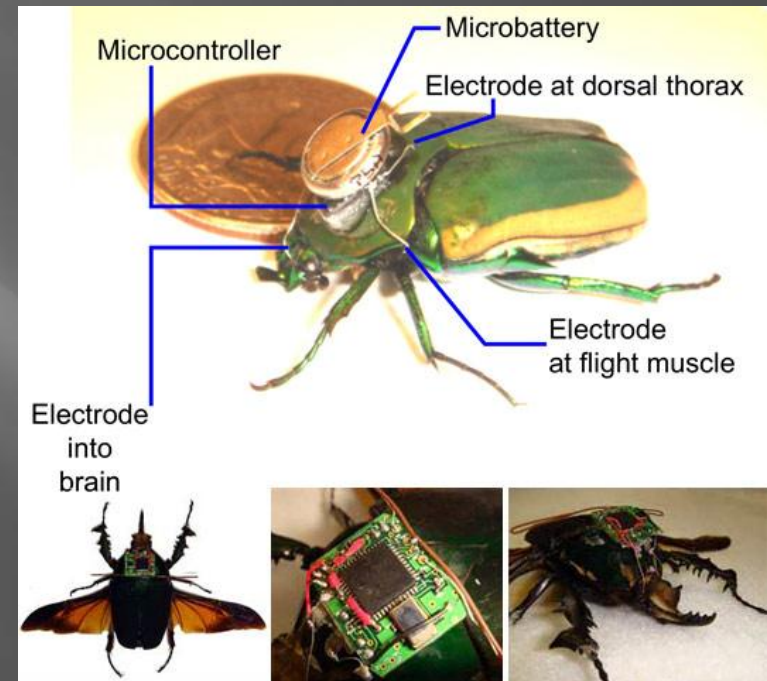
Exploring Mars

- ▣ Challenges:
autonomy, unknown terrain, power, energy, temperature extremes
- ▣ Rewards: Science of the solar system, Discovery of life
- ▣ JPL



Harnessing Life

- ▣ Challenges:
Miniaturization,
Biocompatibility
- ▣ Rewards: Discover
behaviors of life,
Travel to places not
possible for humans
- ▣ UC Berkeley



The Best of the Best

- ▣ Red Whittaker
- ▣ Carnegie Mellon
- ▣ Invented “Field Robotics”



Thank You for Listening

