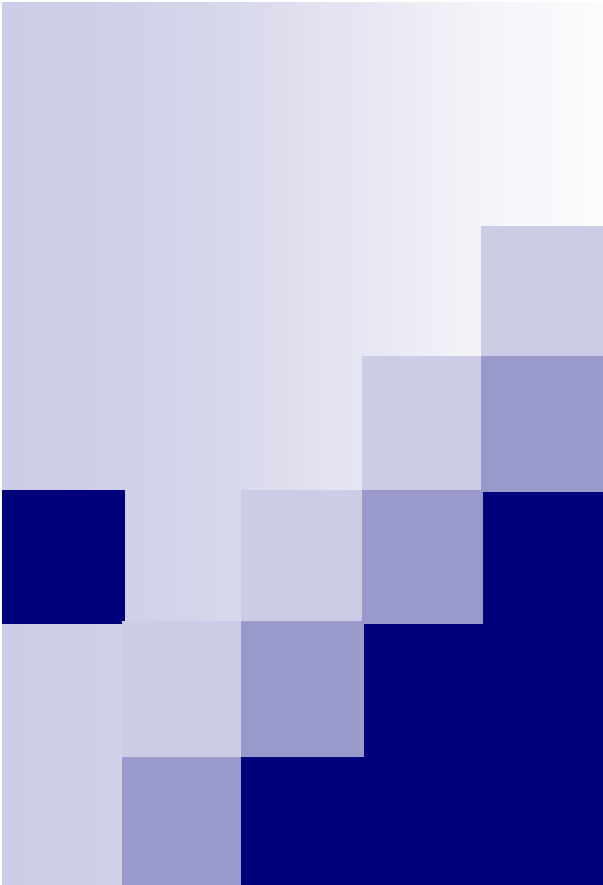
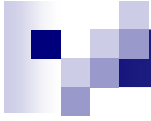




Alan DiPietro

4 Riverside Park, Stow, Massachusetts 978.505.8075 alandipietro@gmail.com



Alan DiPietro

- BSME Worcester Polytechnic Institute
- MSME Tufts University
- General Electric Aircraft Engines
- Draper Laboratory
- iRobot Corporation

VCUUV

“The Tuna”

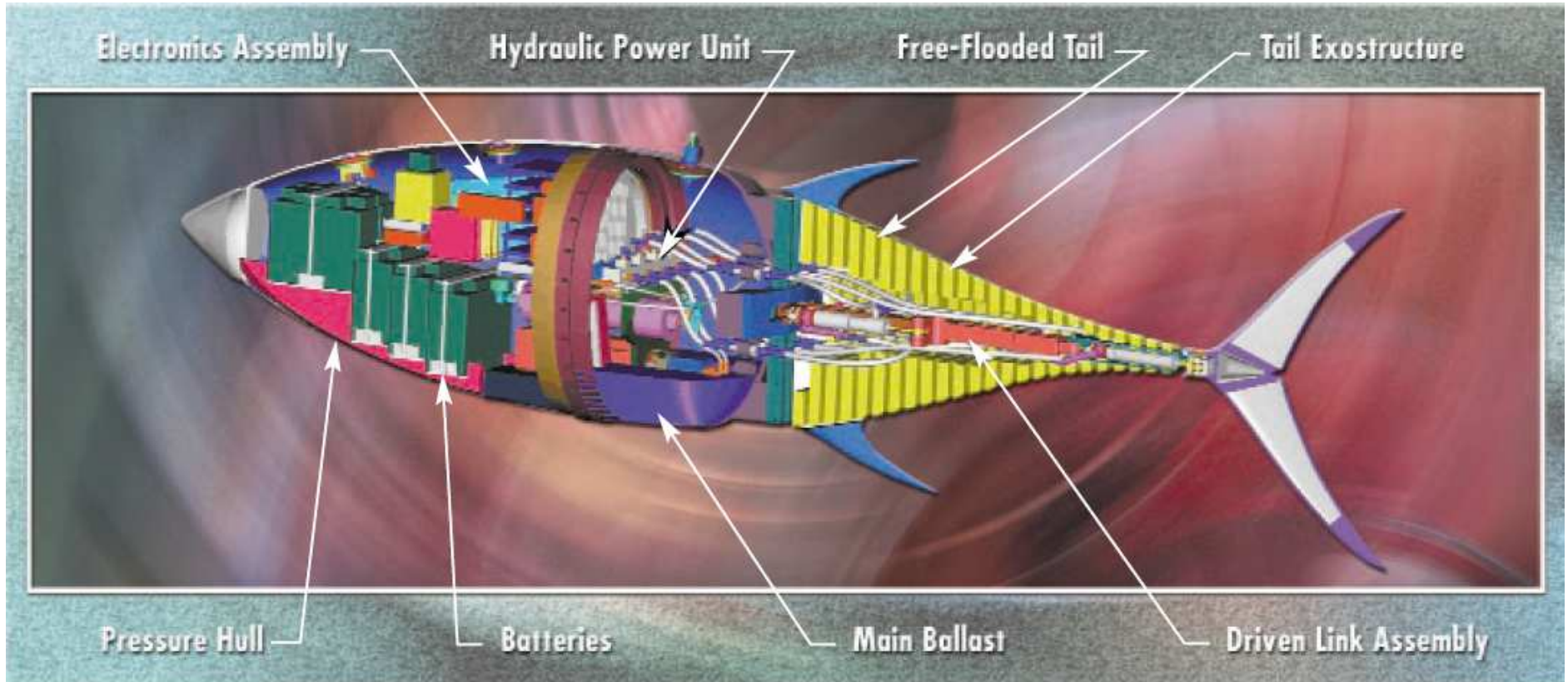


Role:	Mechanical Engineer
Responsibilities:	Prototype, Design & Development
Result:	Successful Swimming



8 foot 300 lb Free Swimming
Brushed Motor
Hydraulic Actuation
IMU – PreProgrammed Control

Lead Acid Batteries
PC104 Stack
Sealed Hull - Flooded Tail
Successful Proof of Concept

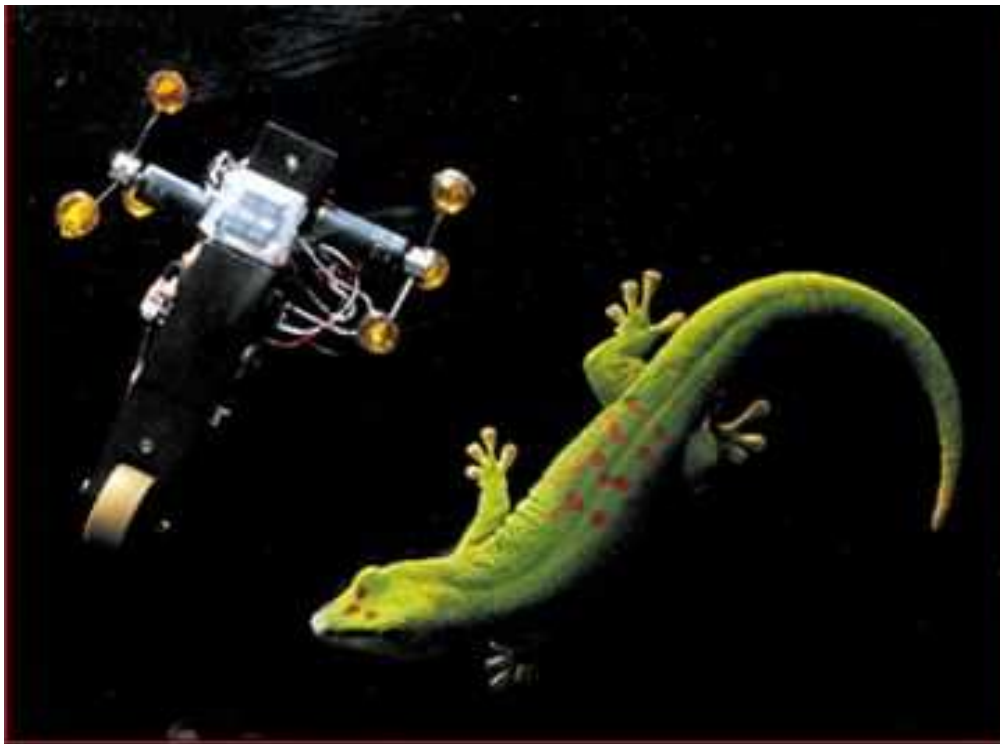


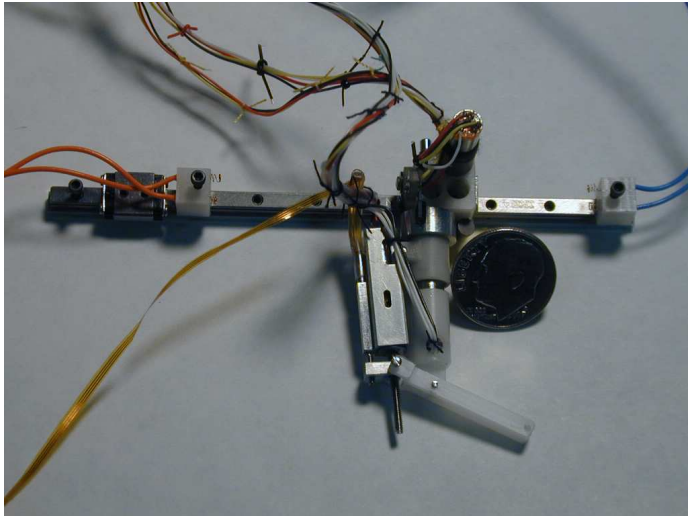


Gecko

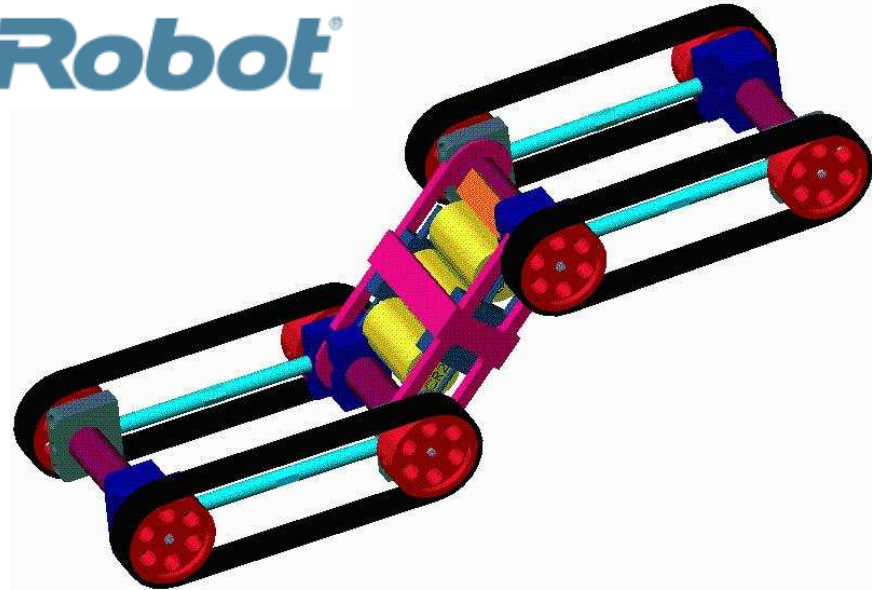
iRobot®

Role:	Program Manager - Mechanical Engineer
Responsibilities:	Prototype, Design & Development, Delivery
Result:	Successful Testing – Follow on Contract

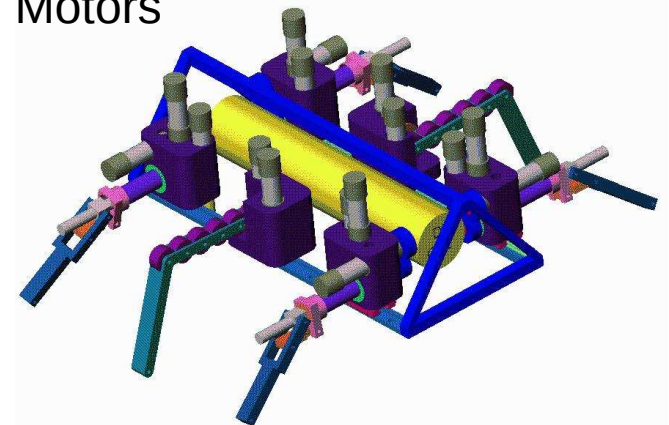
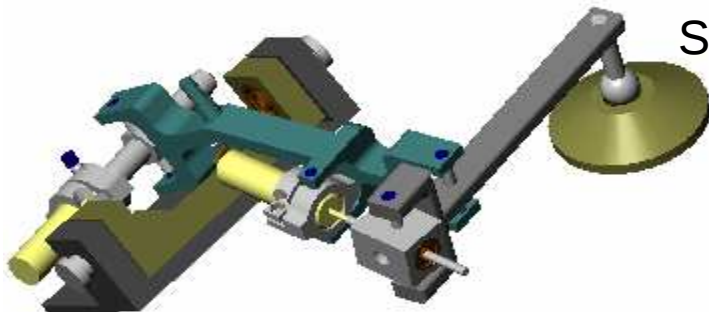


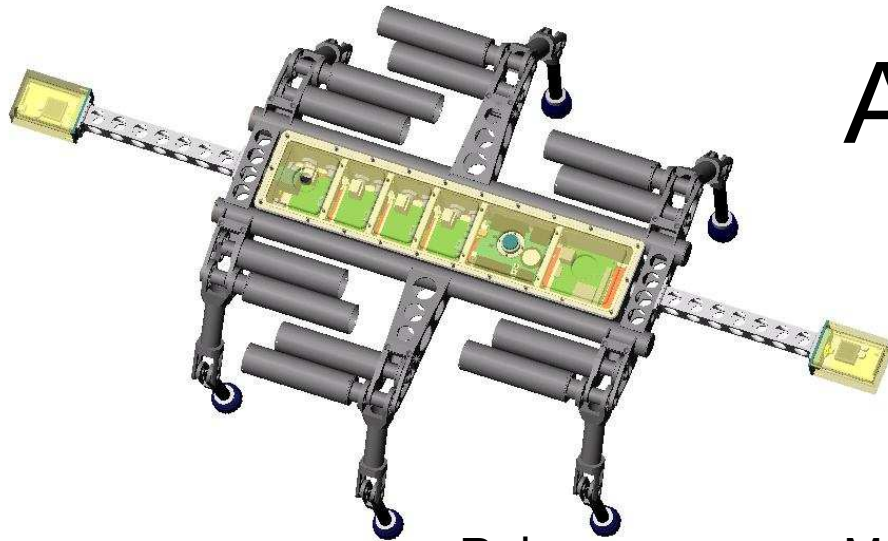


iRobot®



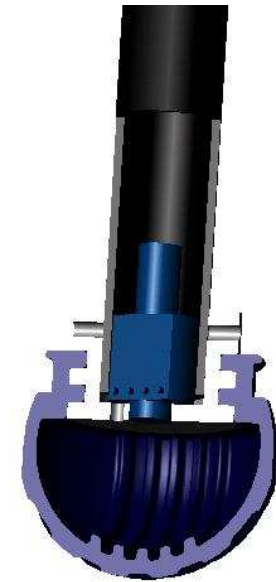
Gecko Inspired – Wall Crawler
 3 Mobility Concepts
 Lithium Primary Batteries
 RC & Off Board Control
 Direct Drive – Brushless Motors
 Single Leg Deliverable





Ariel

iRobot®



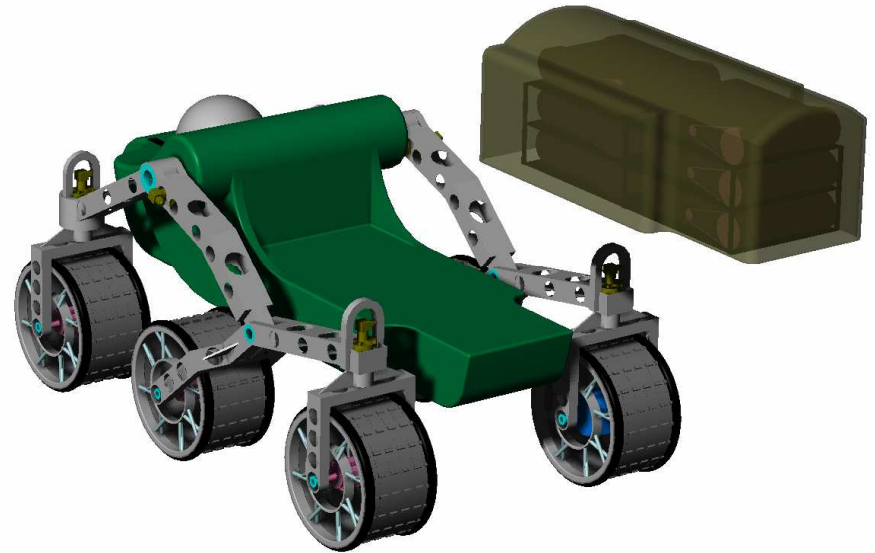
Role: Mechanical Engineer
 Responsibilities: Pedal Sensor Design
 Result: Successful Demo



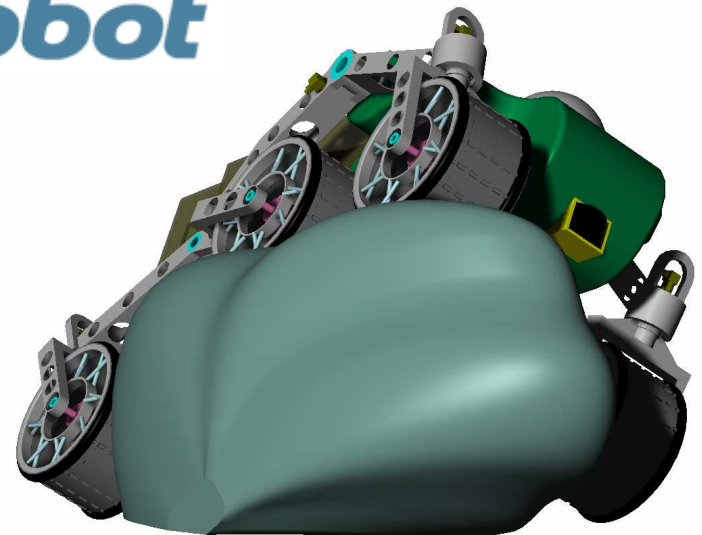
Crab Inspired - Littoral Zone
 Motorola 68332 Processor
 Autonomy - Preprogrammed
 Waterproof
 NiCad Batteries
 Tendon Drive – Brushed Motors

UGCV

Role: Mechanical Engineer
Responsibilities: Proposal and Concept
Result: 1/10 Scale Prototype



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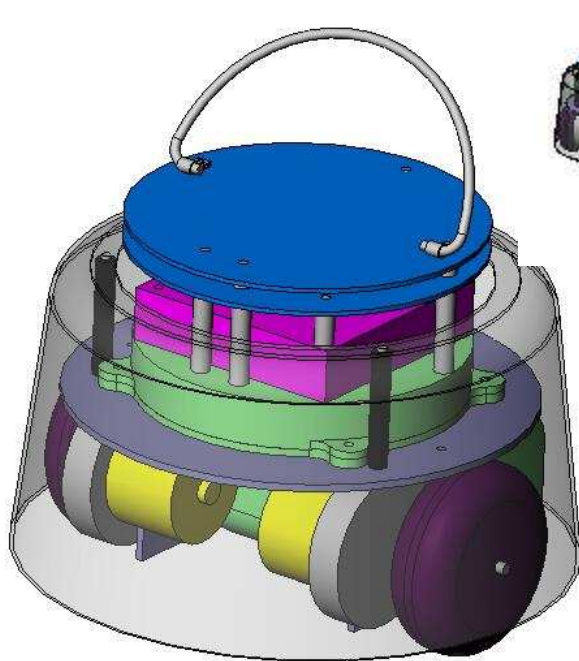


Rocker Bogie Marsupial
Moon Buggy
Diesel Electric Hybrid
NiCad Batteries
Brushless Motors

SWARM



Role: Mechanical Engineer
Responsibilities: Pheromone Sprayer Design
Result: Successful Demo
Basis for the Swarm of 100

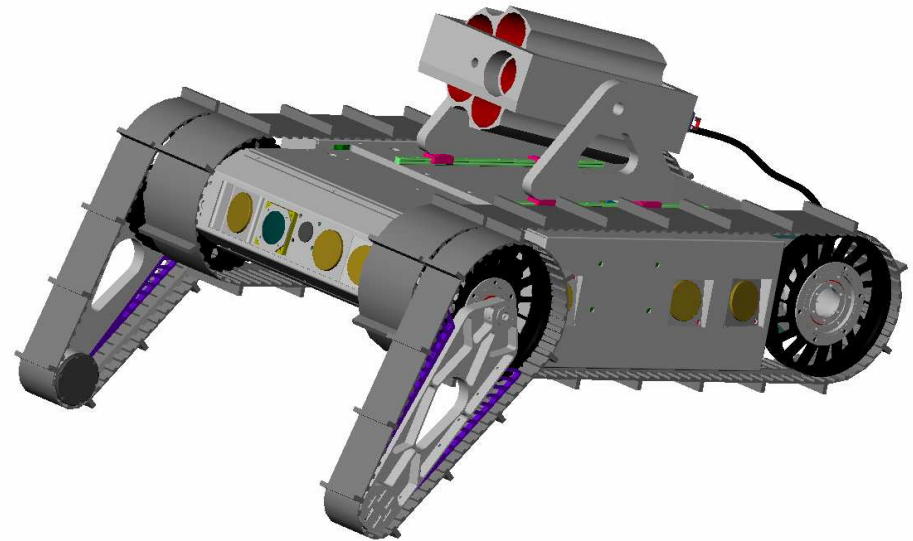


Rug Warrior Based
IR Comms
Motorola 68332 Processor
Proximity and Trail Following Behaviors

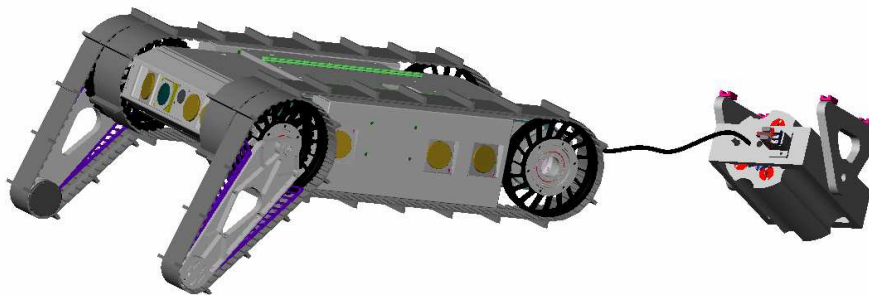
Urban Upgrade

w/Deployer

Role: Mechanical Engineer
Responsibilities: Customer Trials Testing
Result: Successful Demo
Unreliable Product
Lessons Learned Applied to PackBot



iRobot®

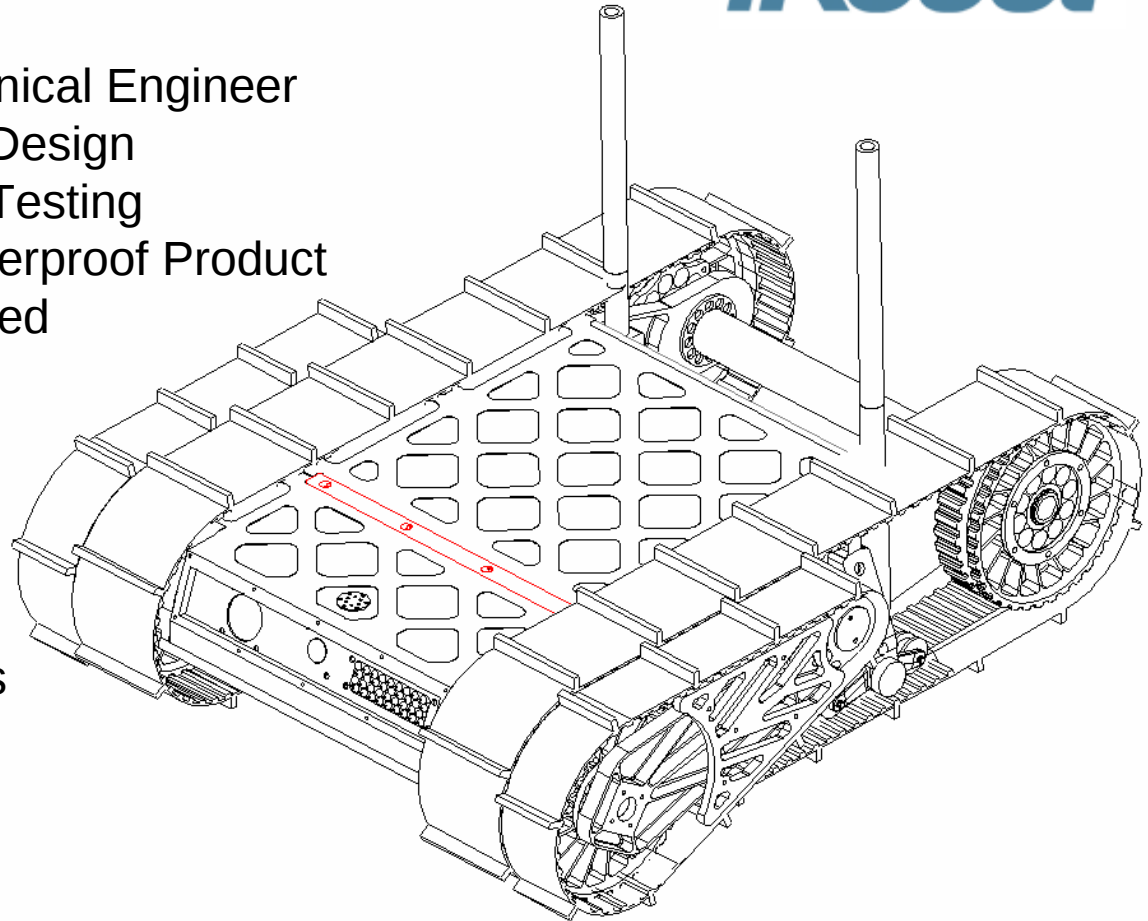


Tracked w/Articulated Flippers
NiCad Batteries
Wireless Digital Comms
Direct Drive Brushed Motors
Urban Robot Product
RWI Processor and Sensor Suite
40mm Multi-Sensor Launcher

K8

iRobot®

Role: Lead Mechanical Engineer
Responsibilities: Mechanical Design
Prototyping Testing
Result: Rugged Waterproof Product
2 Units Fielded

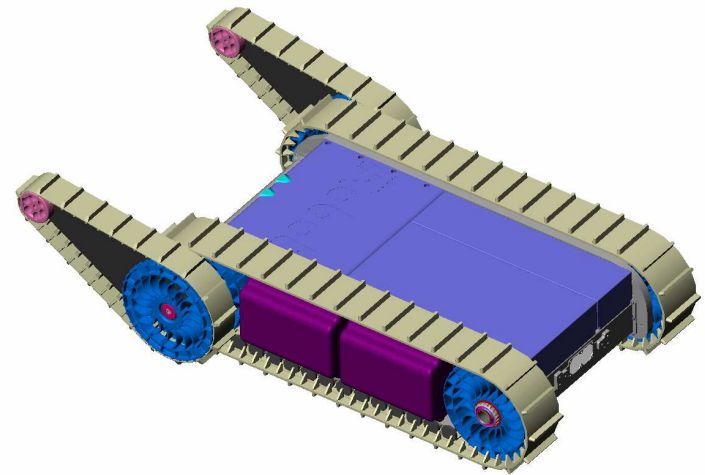
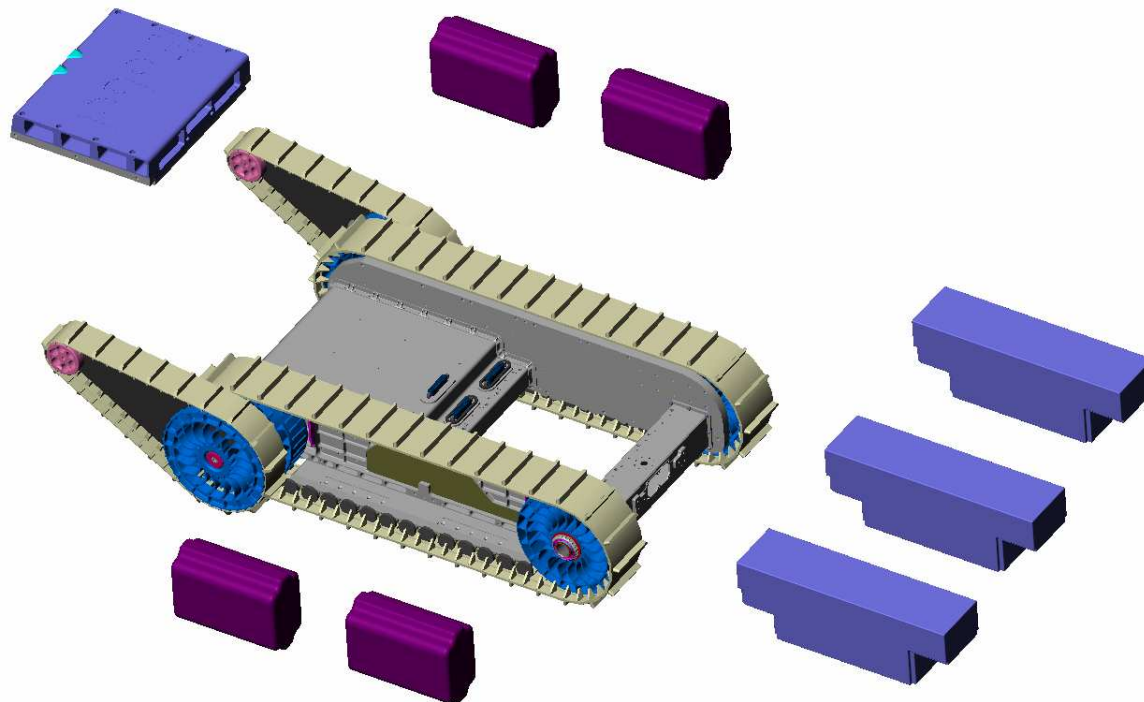


Tracked w/Articulated Flippers
NiCad Batteries
Wireless Analog Comms
Direct Drive Brushed Motors
Imbedded Microprocessor
Rugged Waterproof

PackBot Development



Role: Mechanical Engineer
Responsibilities: Mechanical Design
Prototyping Testing
Result: First Robot in Afghanistan



Tracked w/Articulated Flippers
NiCad Batteries
Wireless Comms
Direct Drive Brushed Motors
Pentium III Processor
Flexible Payload System
Rugged Waterproof

PackBot Scout/Explorer

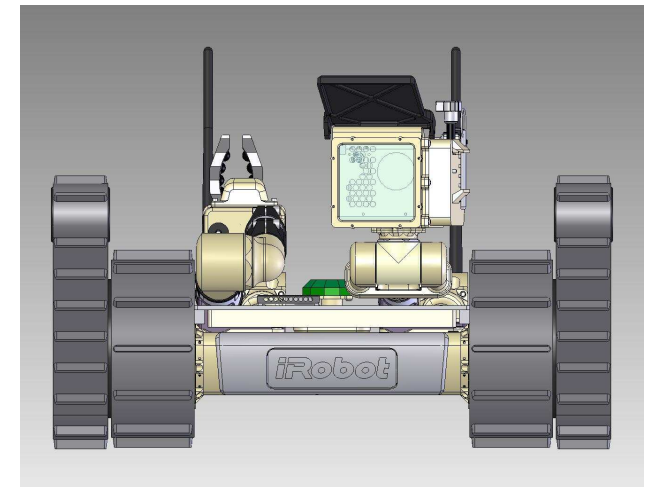
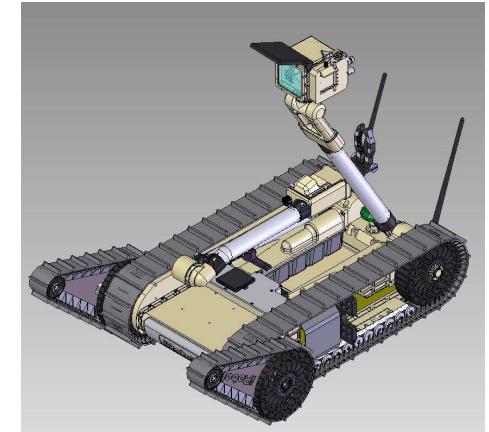


PackBot EOD/ICECAP



PackBot X-Bot

iRobot



Role:	Chief Engineer
Responsibilities:	Proposal Prototype Planning Design Development Delivery
Result:	\$300M in Product Delivered