

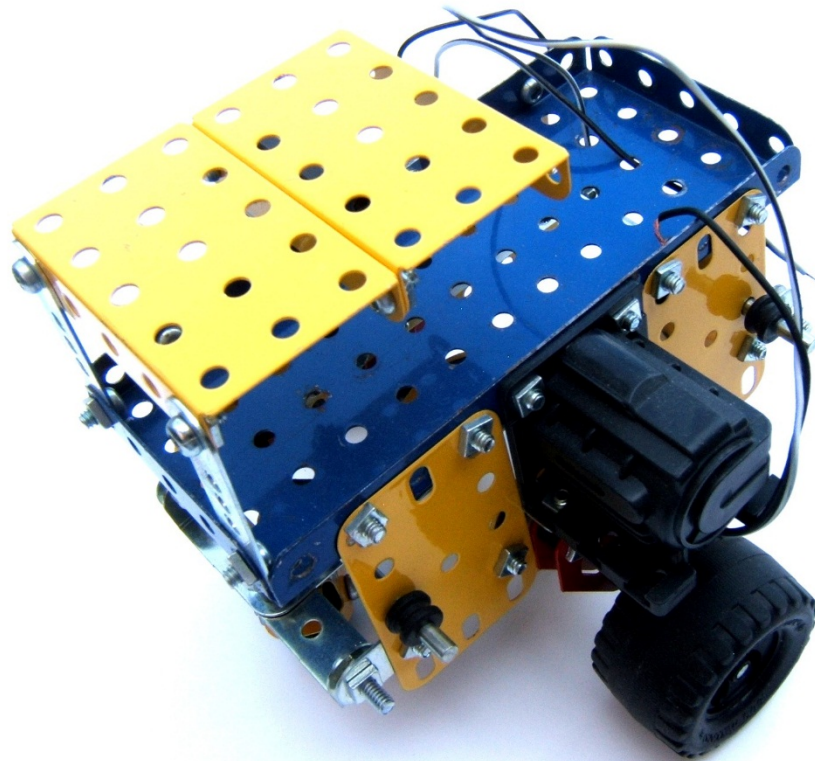


*European Regional Development Fund - Investing in your Future - PN: 7-022-BE\_i-MOCCA  
"INTERREG IVA 2 Mers Seas Zeeën Cross-border Cooperation Programme 2007-2013"*

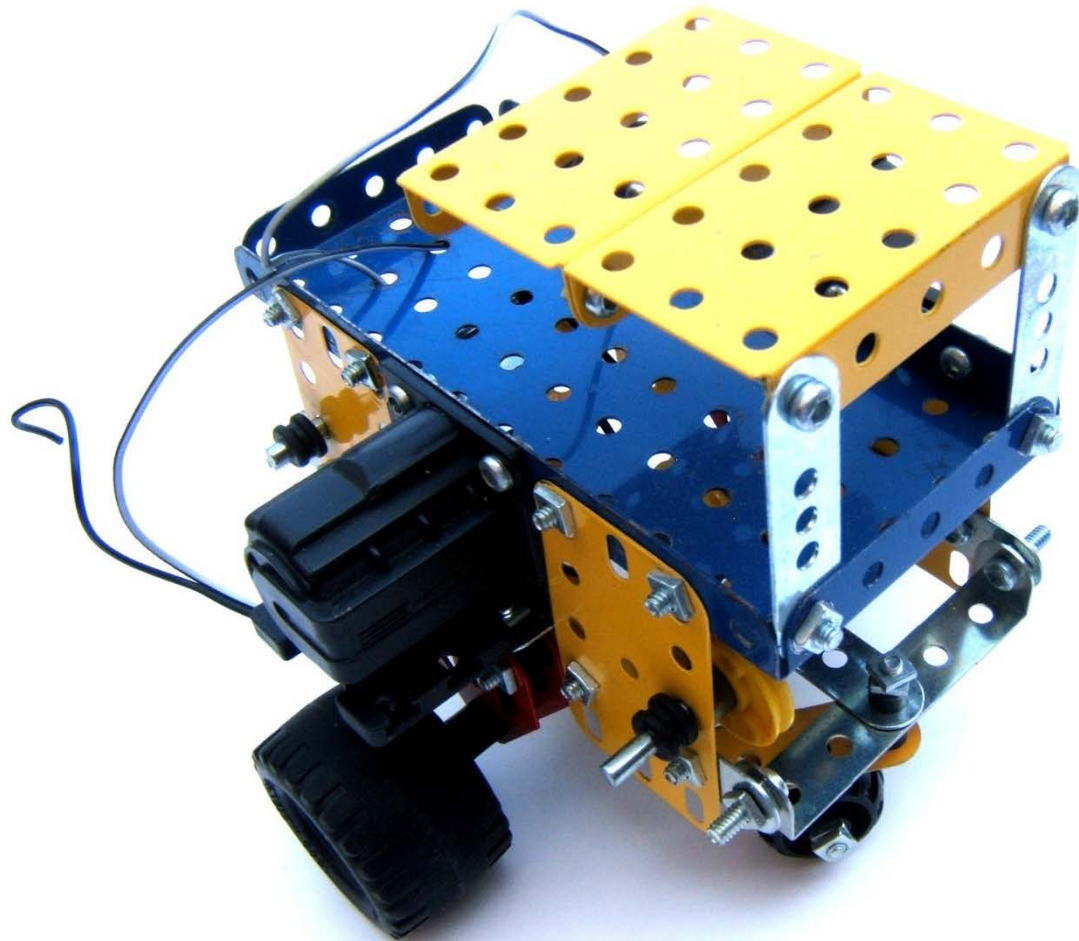
# The Evolution of Mobile Robotics at the University of Greenwich (in pictures)

Dr R C Seals

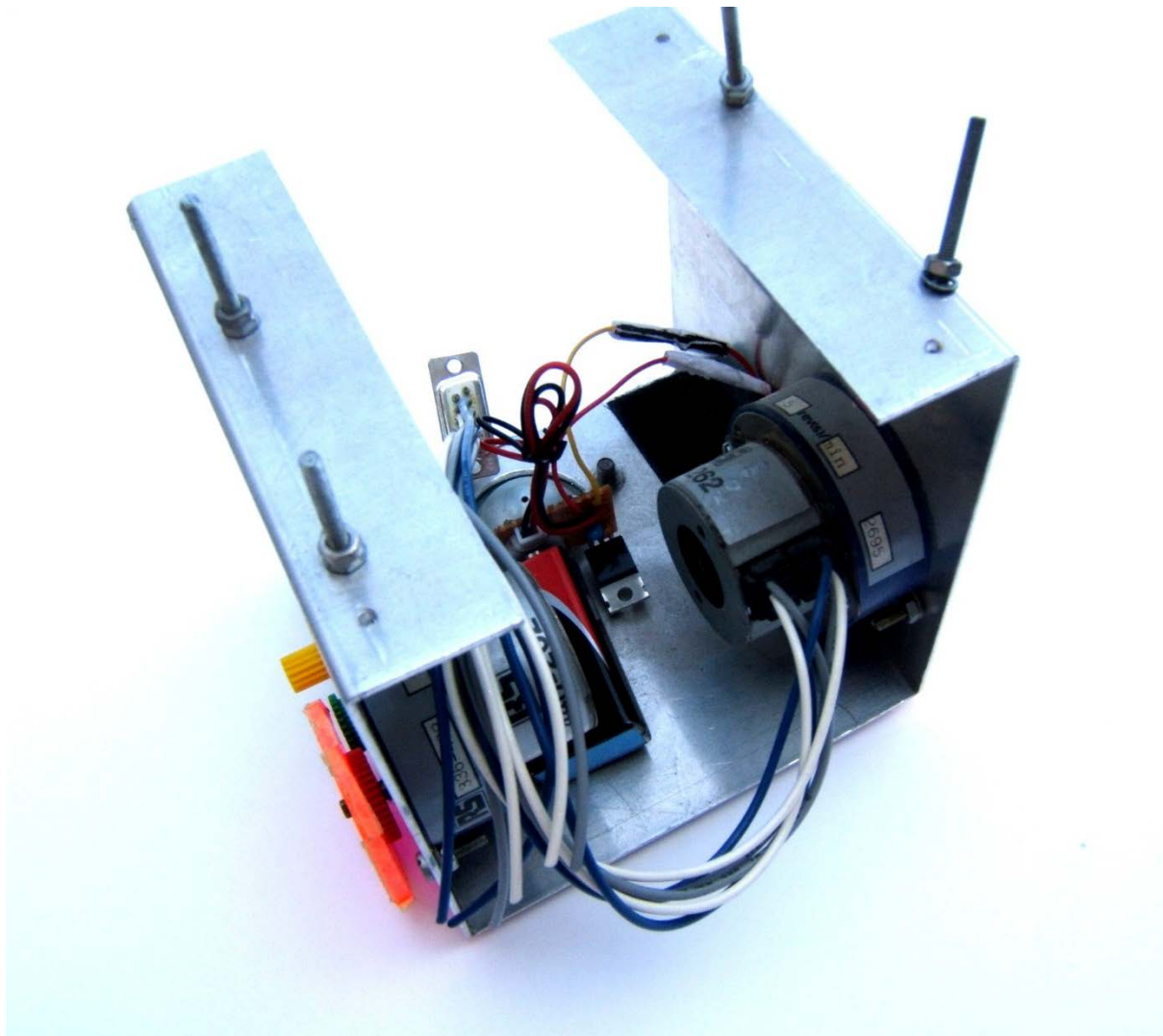
# The Early Days



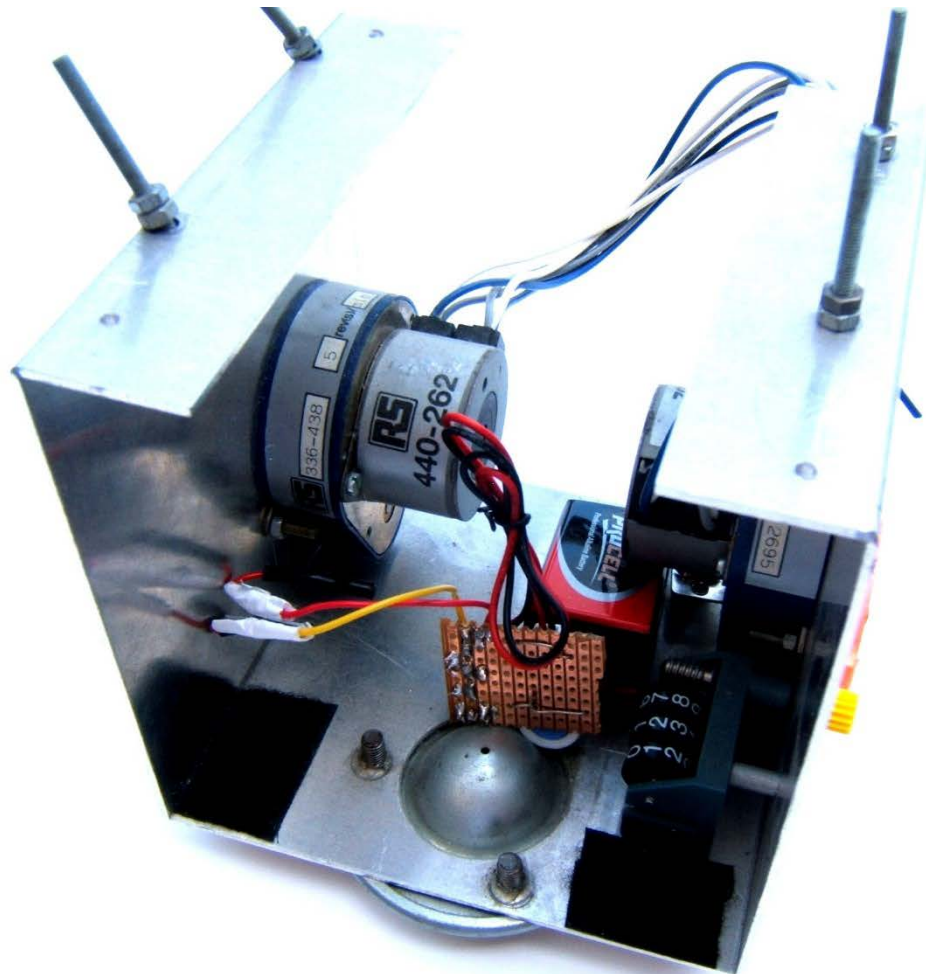
# Another View



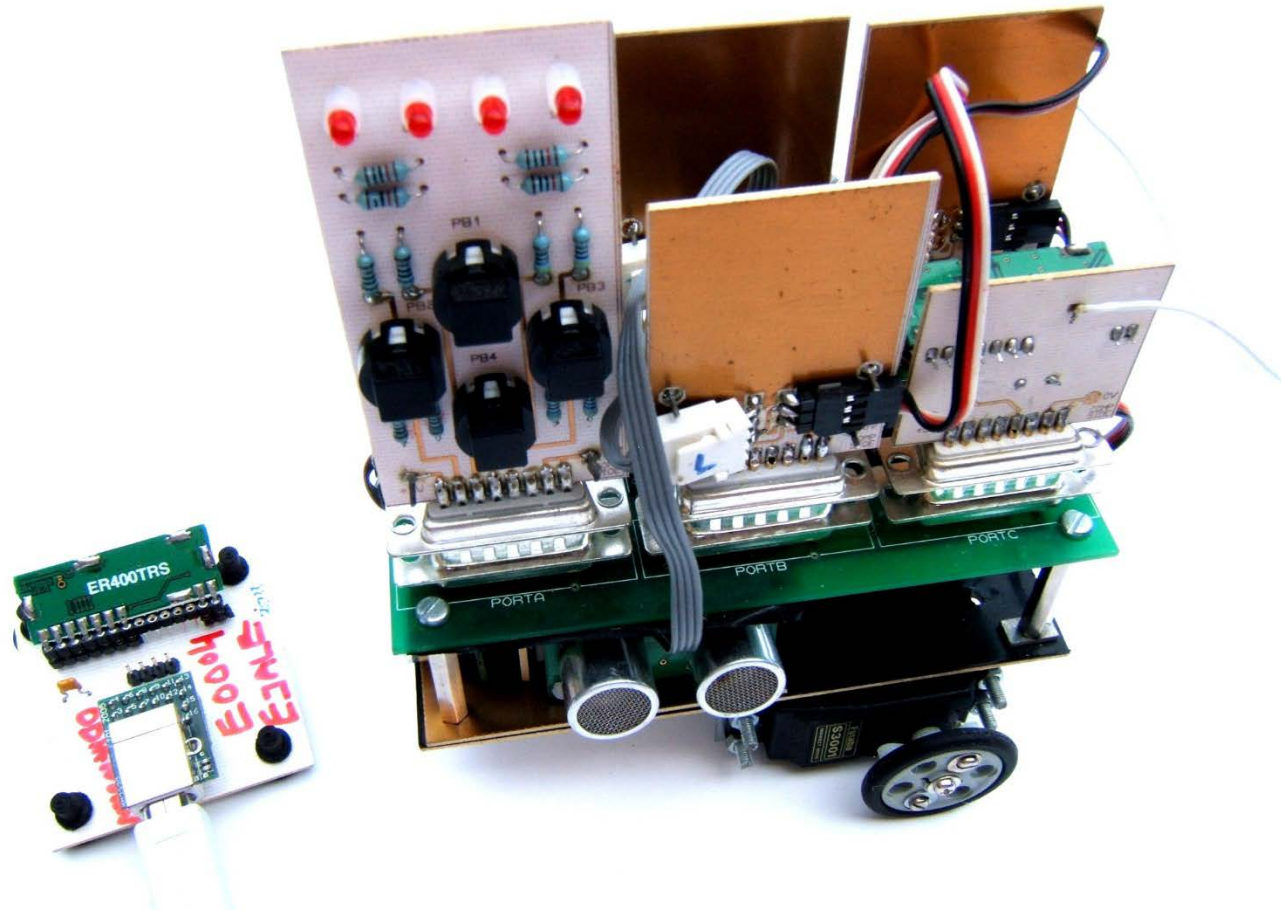
# Another Variant



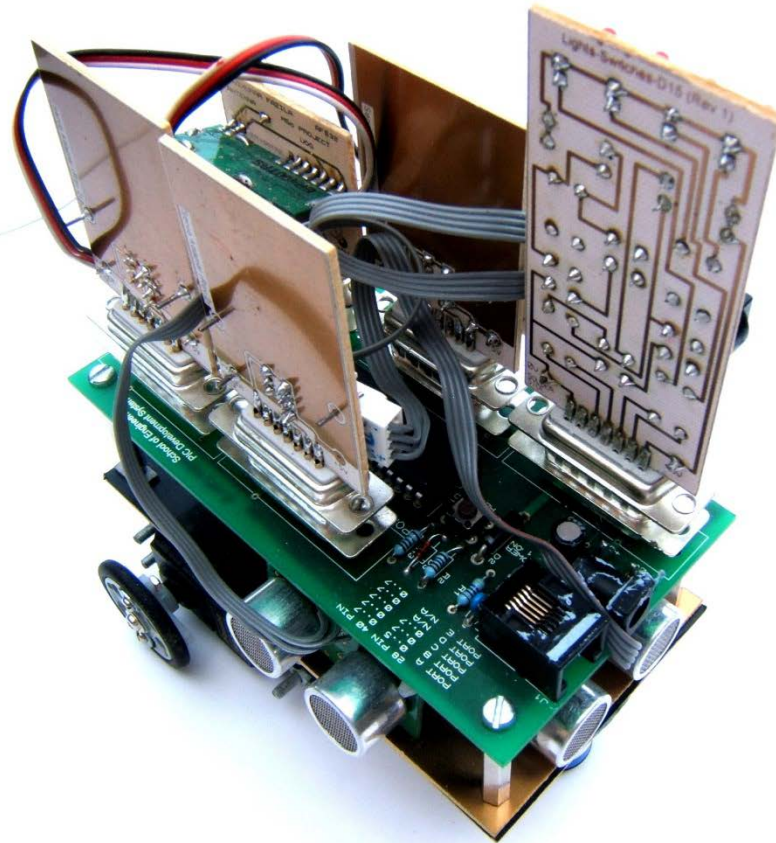
# Internal View



# A Modular Approach was Tried



Functional but complicated and heavy



# Infrared Controlled Helicopter

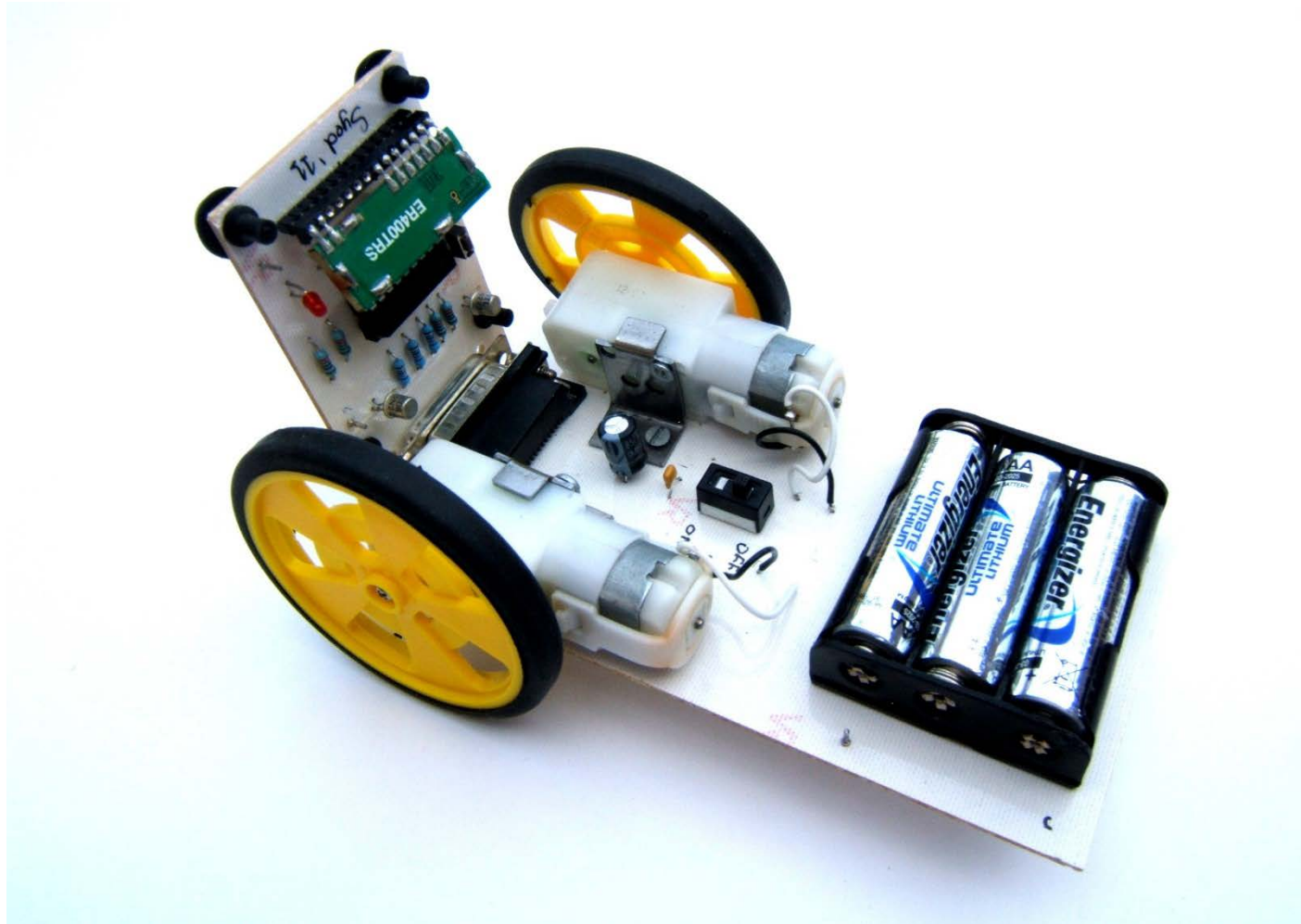




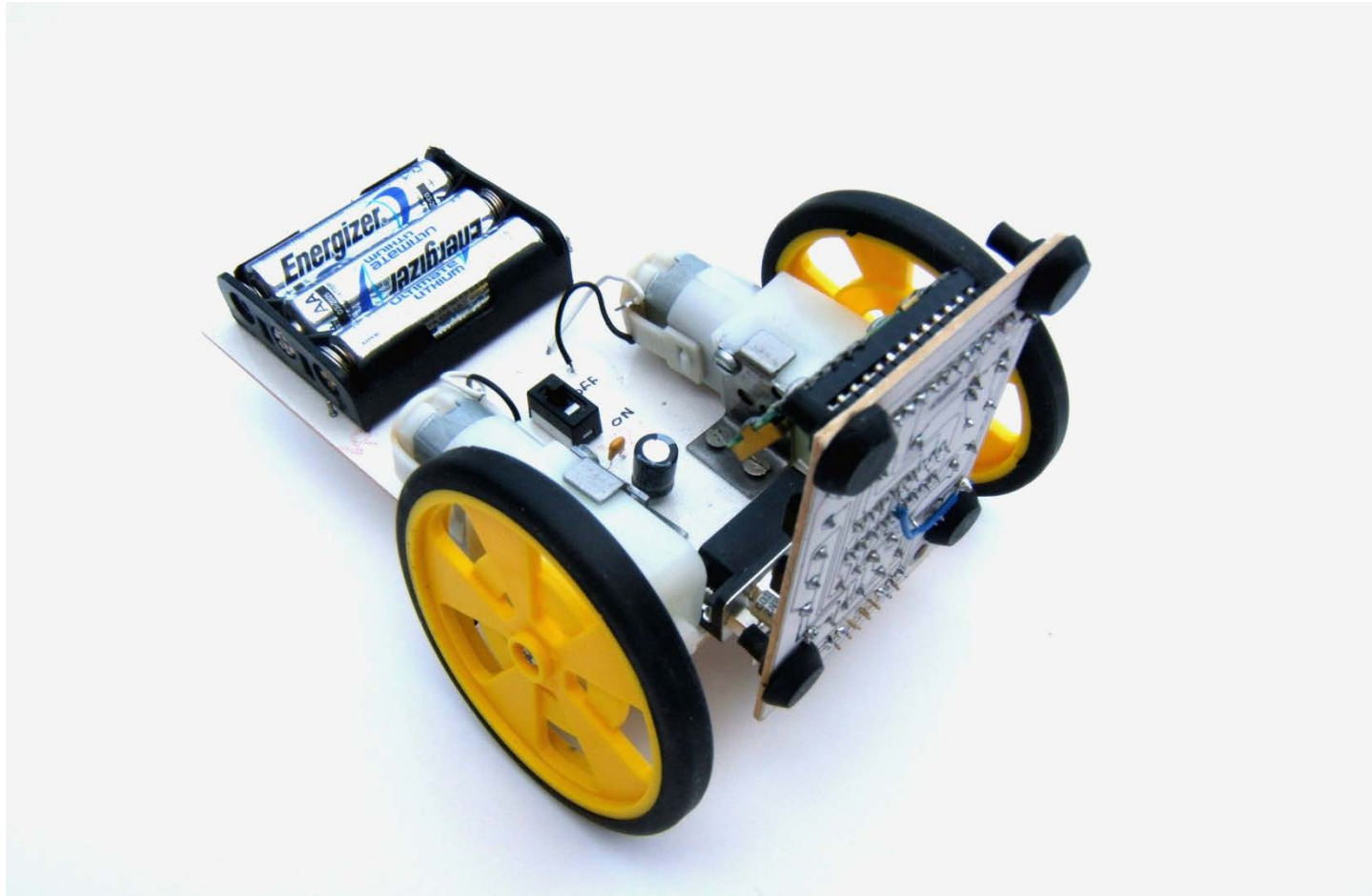
# Infrared Controlled Digger



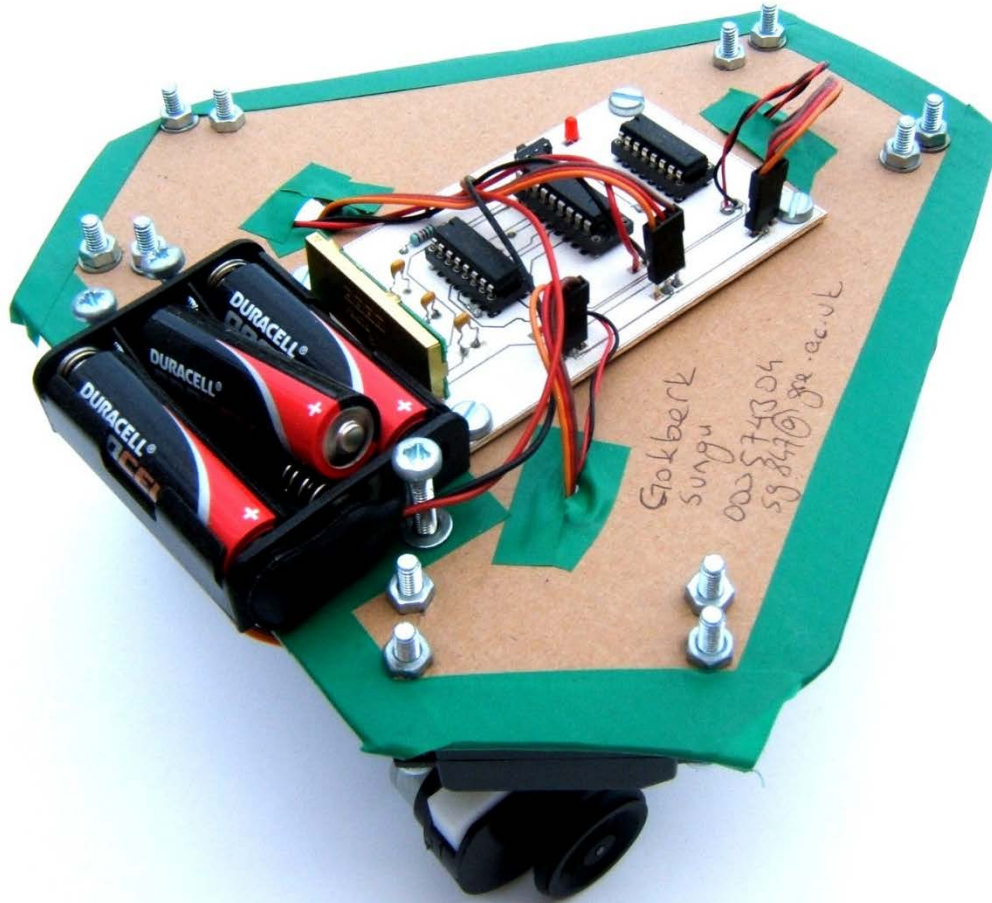
# A Student Centred Design



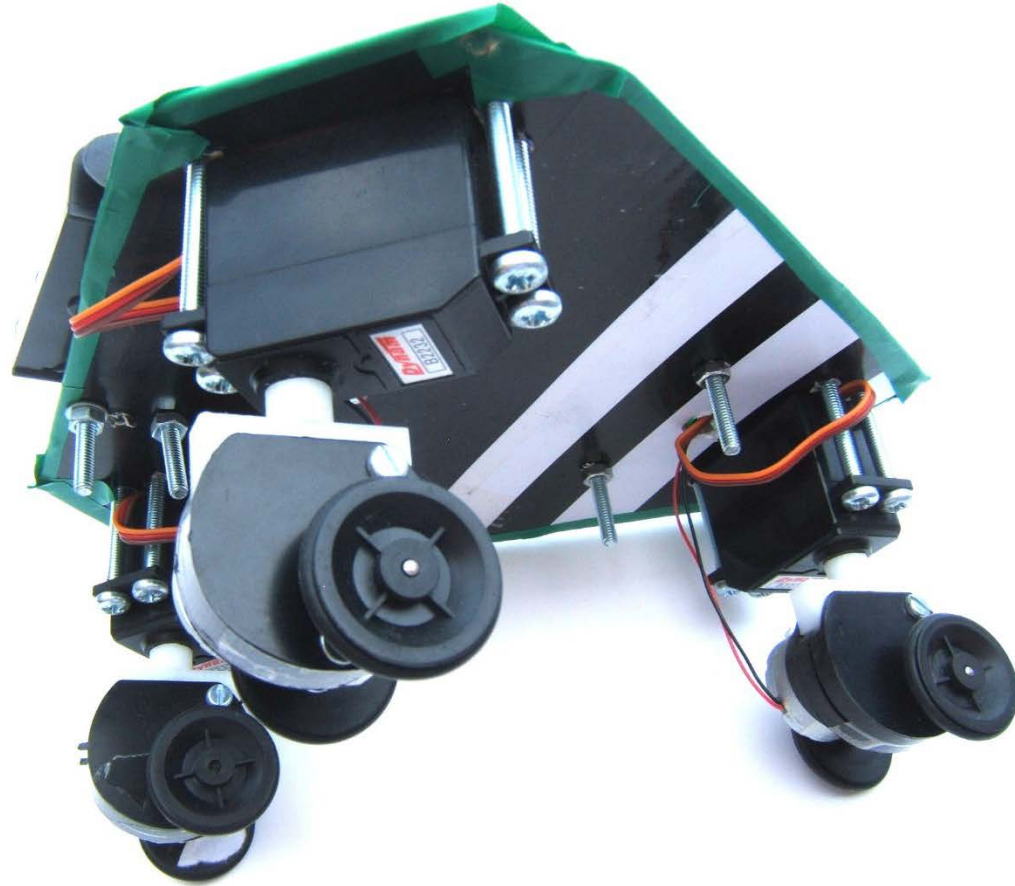
# Pre-constructed Motor Chassis with Student designed and made control PCB



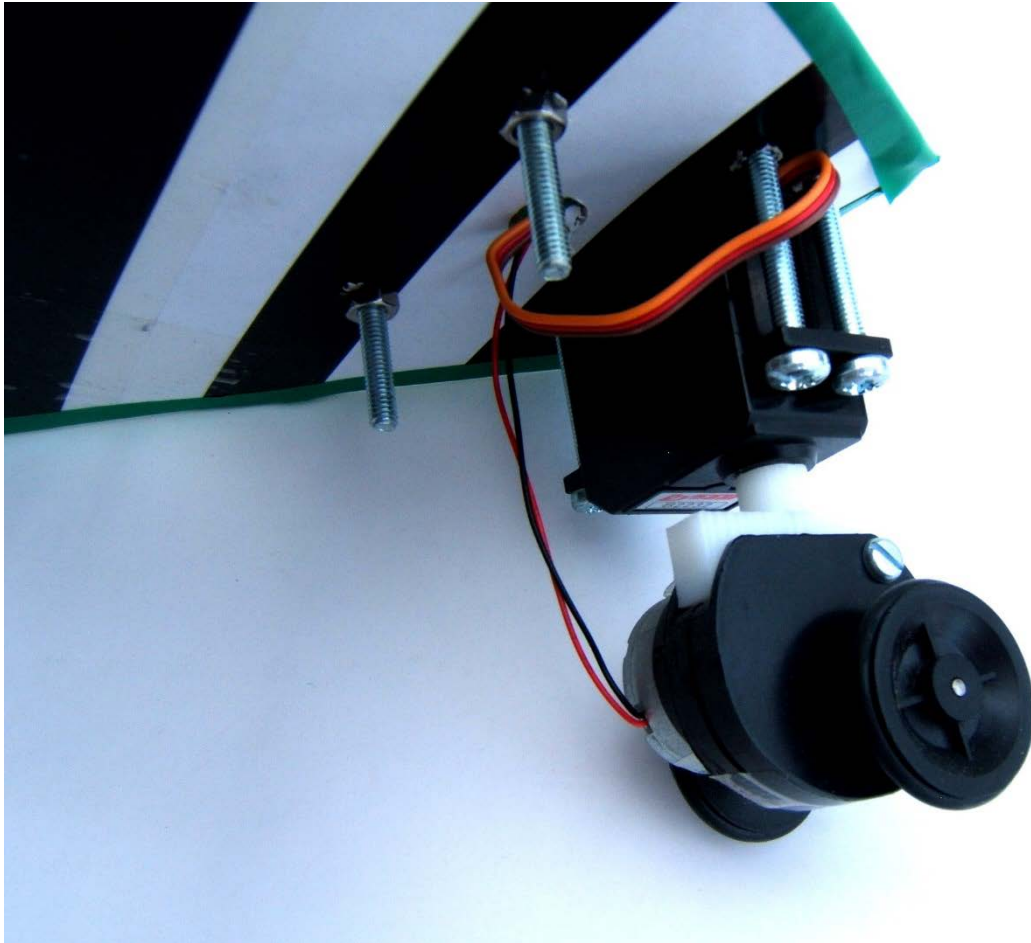
# Holonomic



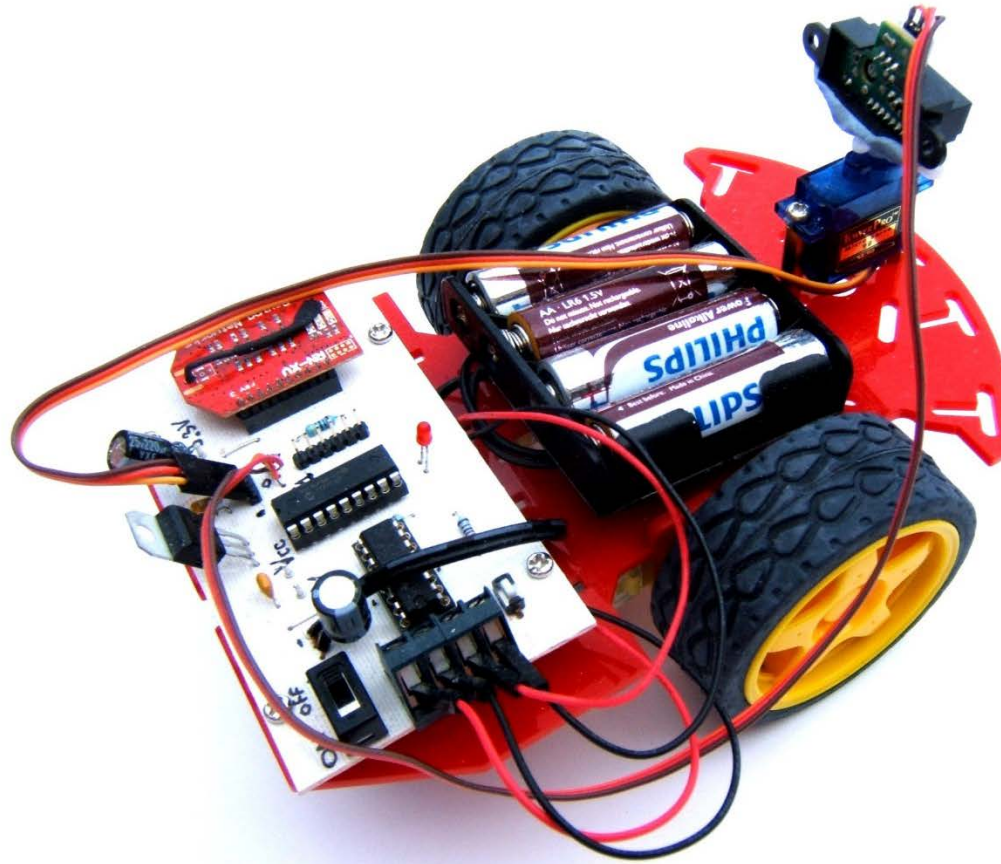
# Small DC motor and gearbox with RC Servo steering



# Each Wheel Unit is Independent



# The First iMOCCA Mobile Robot

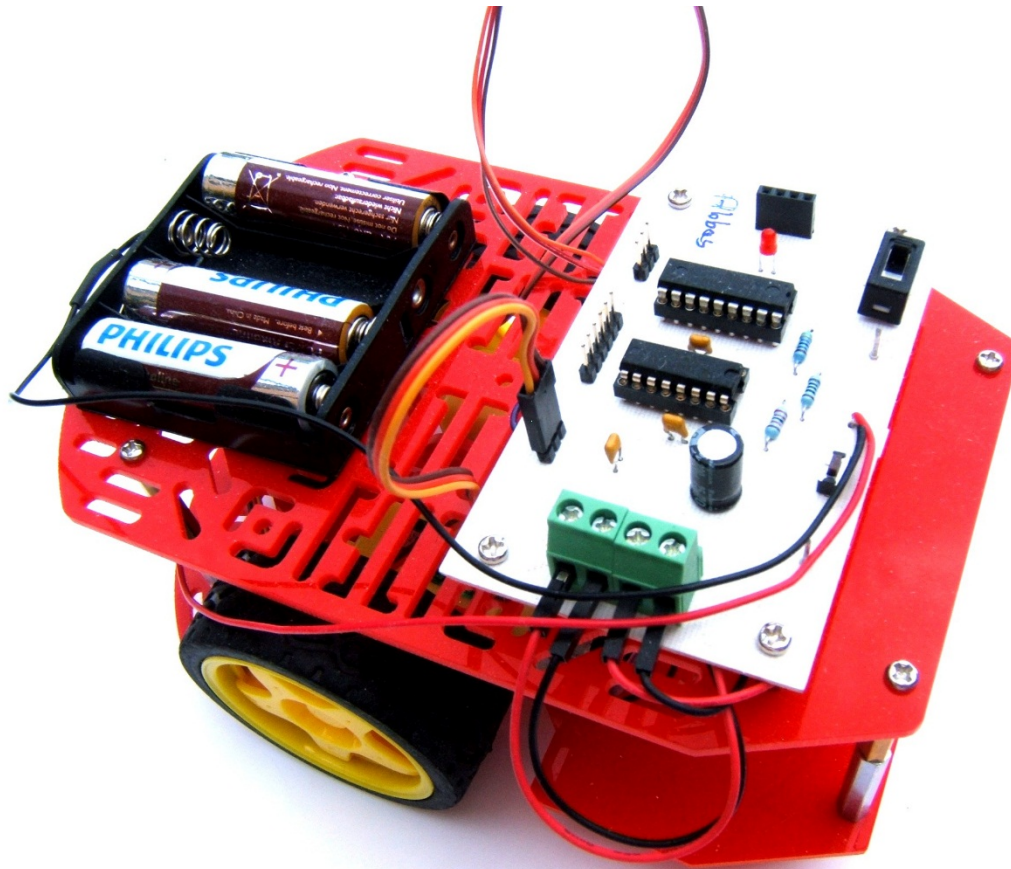


# Dual DC Motor with H-Bridge Driver and WiFi Interface





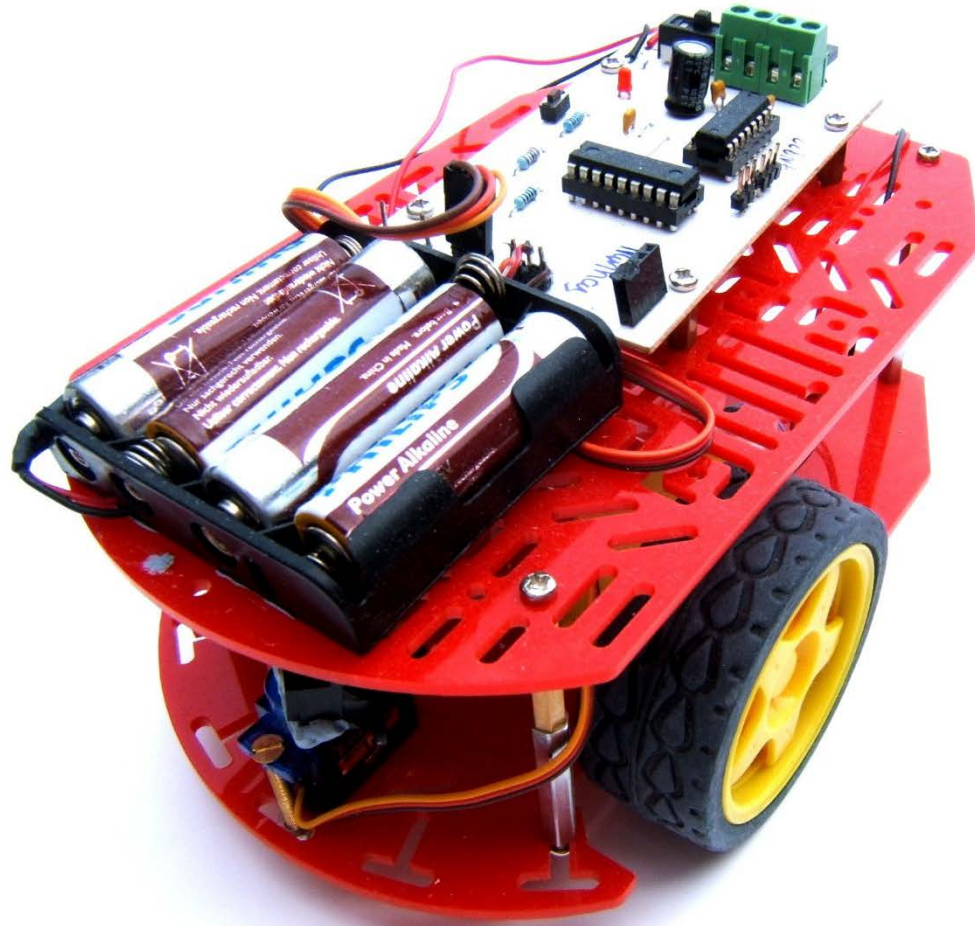
# A Later Version with WiFi Replaced with Bluetooth



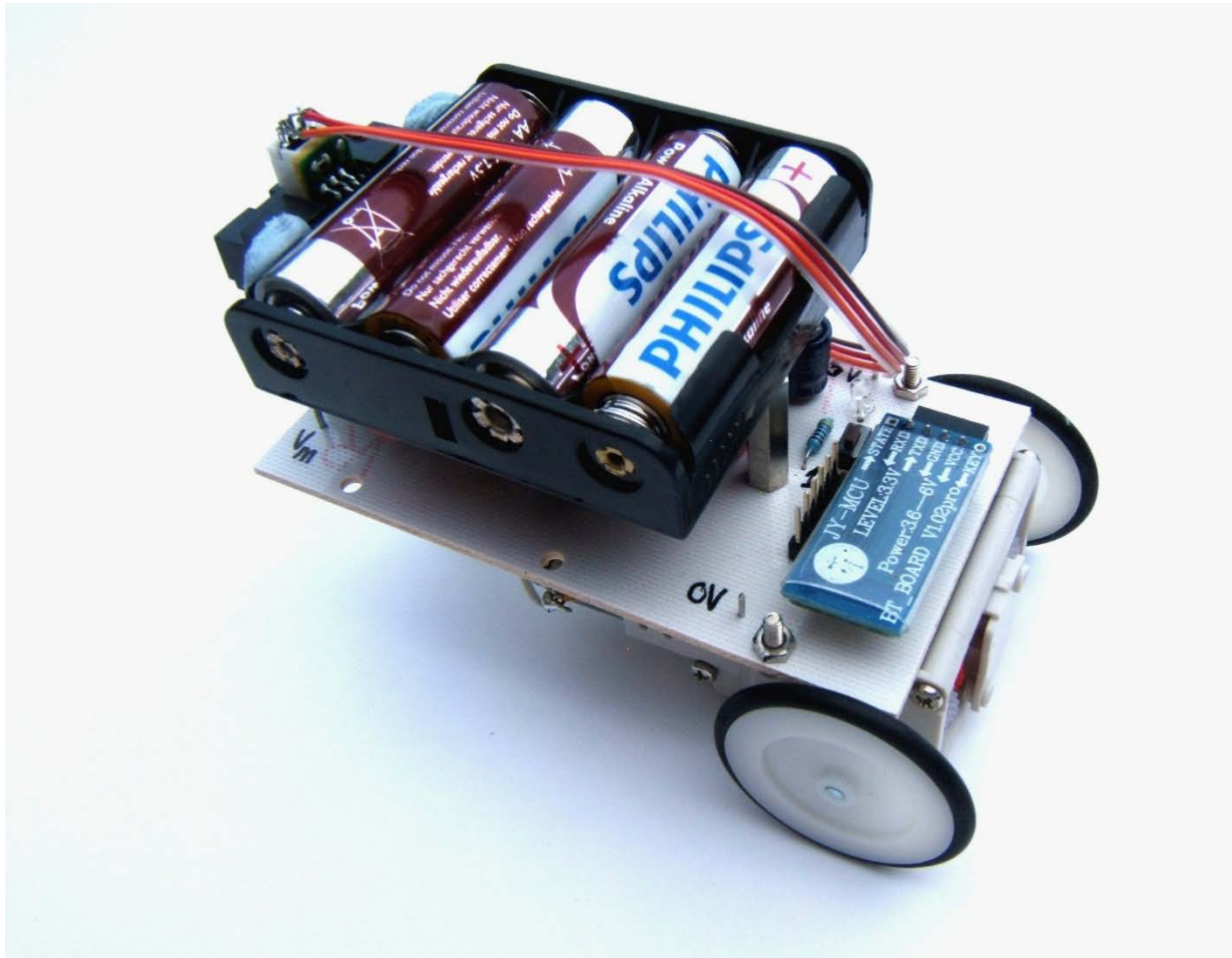
# Distance Sensor Scanned by a Small RC Servo Motor



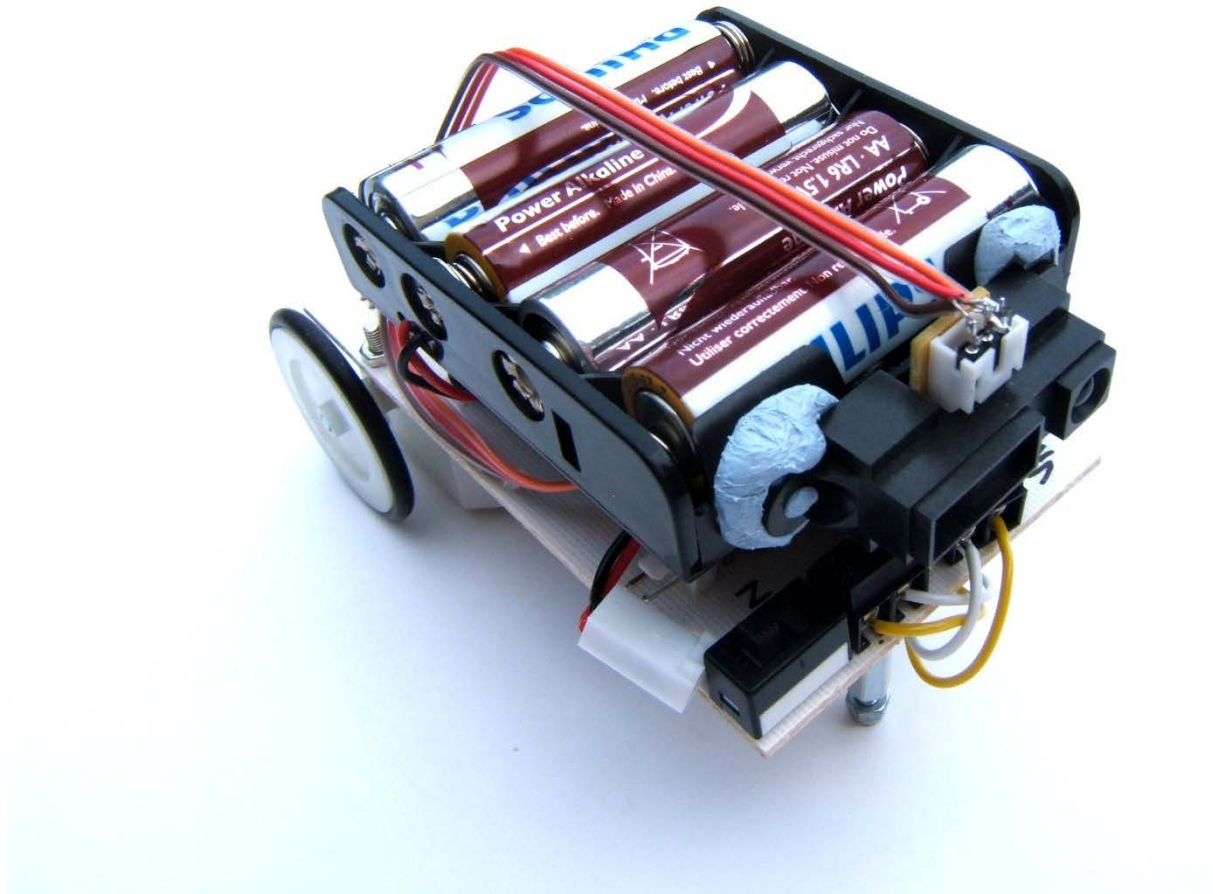
# Student Designed Control PCB



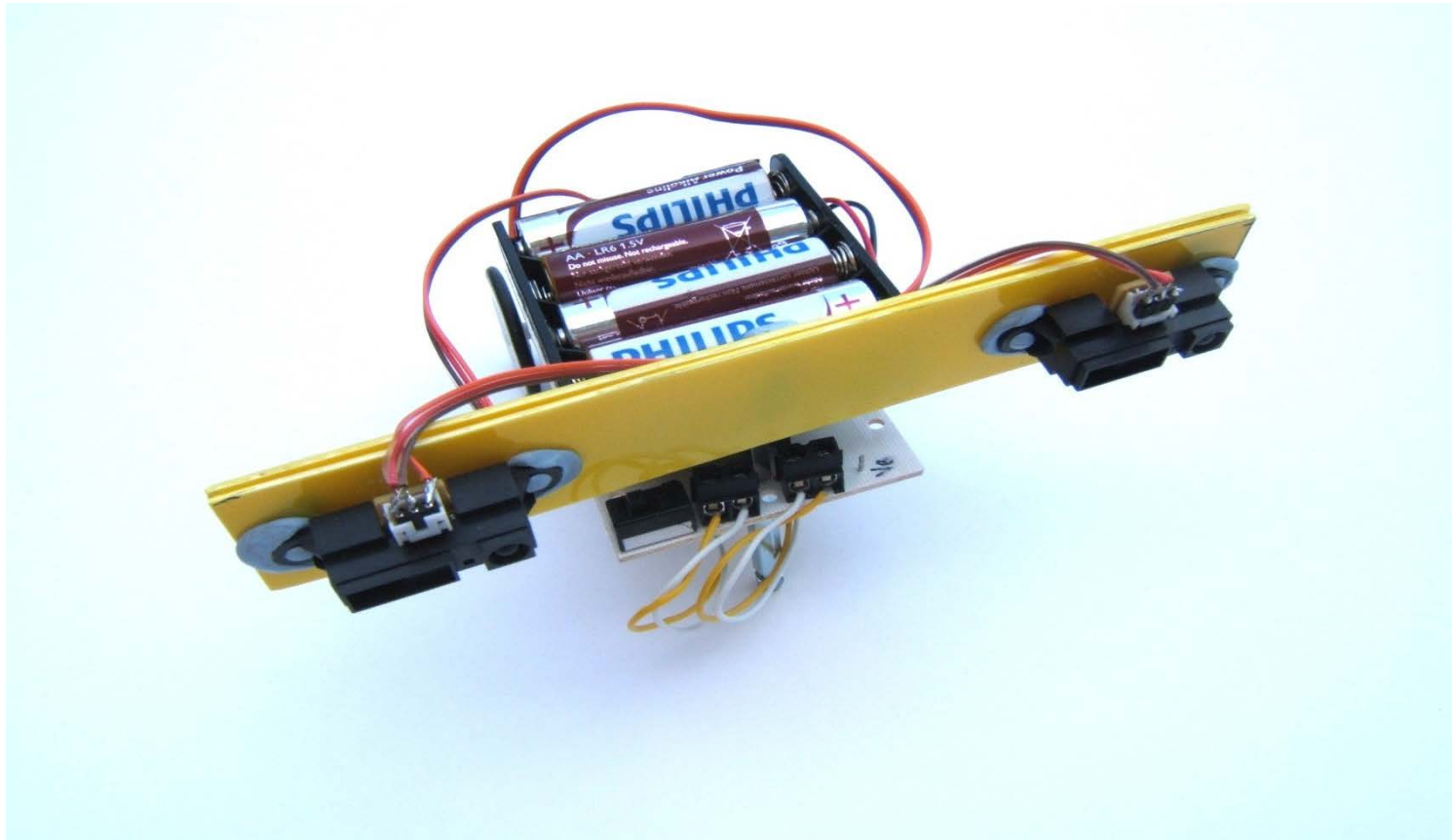
# Smaller Herd Mobile Robot with Bluetooth Link



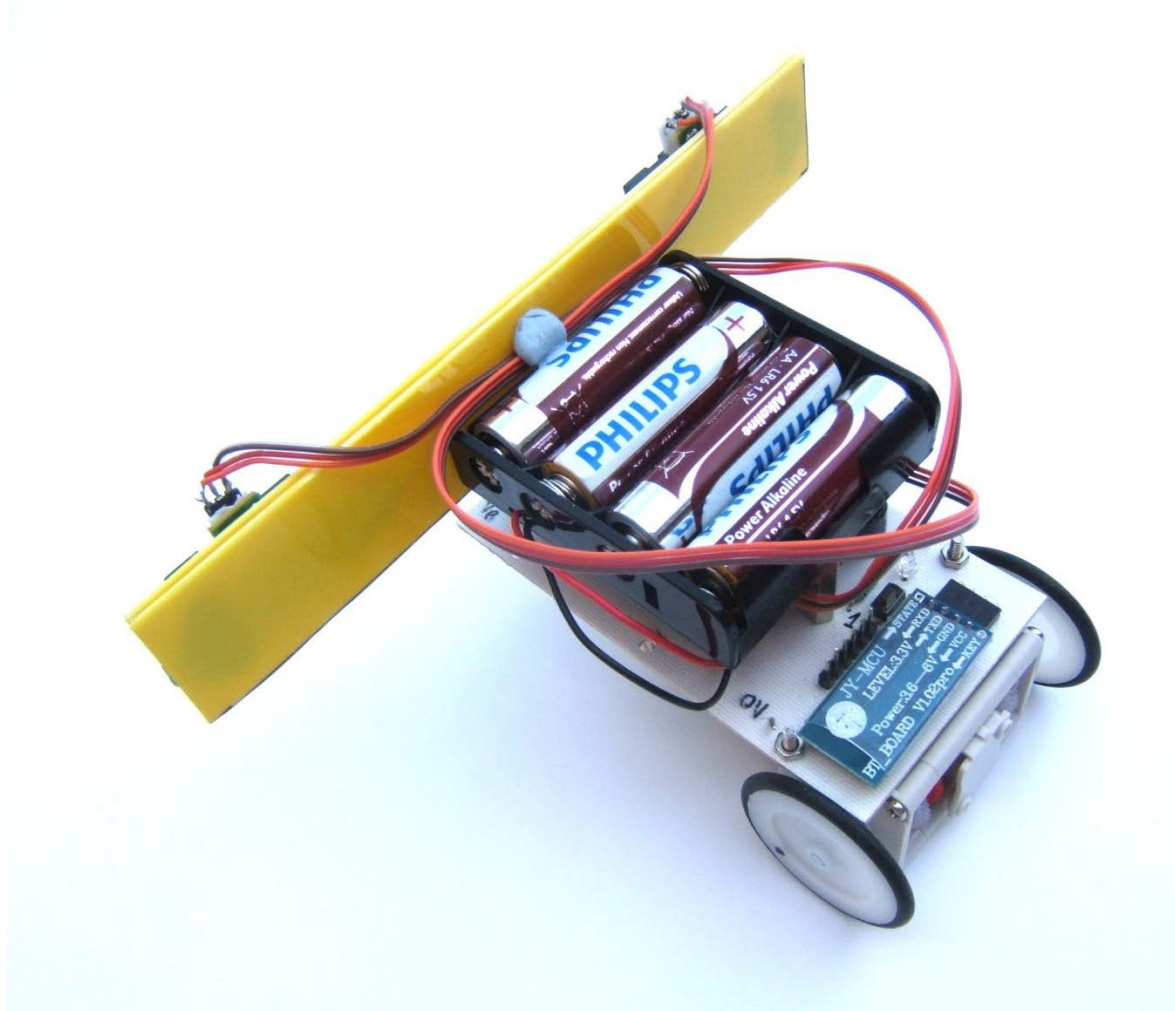
# Fixed Orientation Distance Sensor



# A Follow-Me Cart



# Dual Fixed Orientation Distance Sensors



# Something a Little Larger

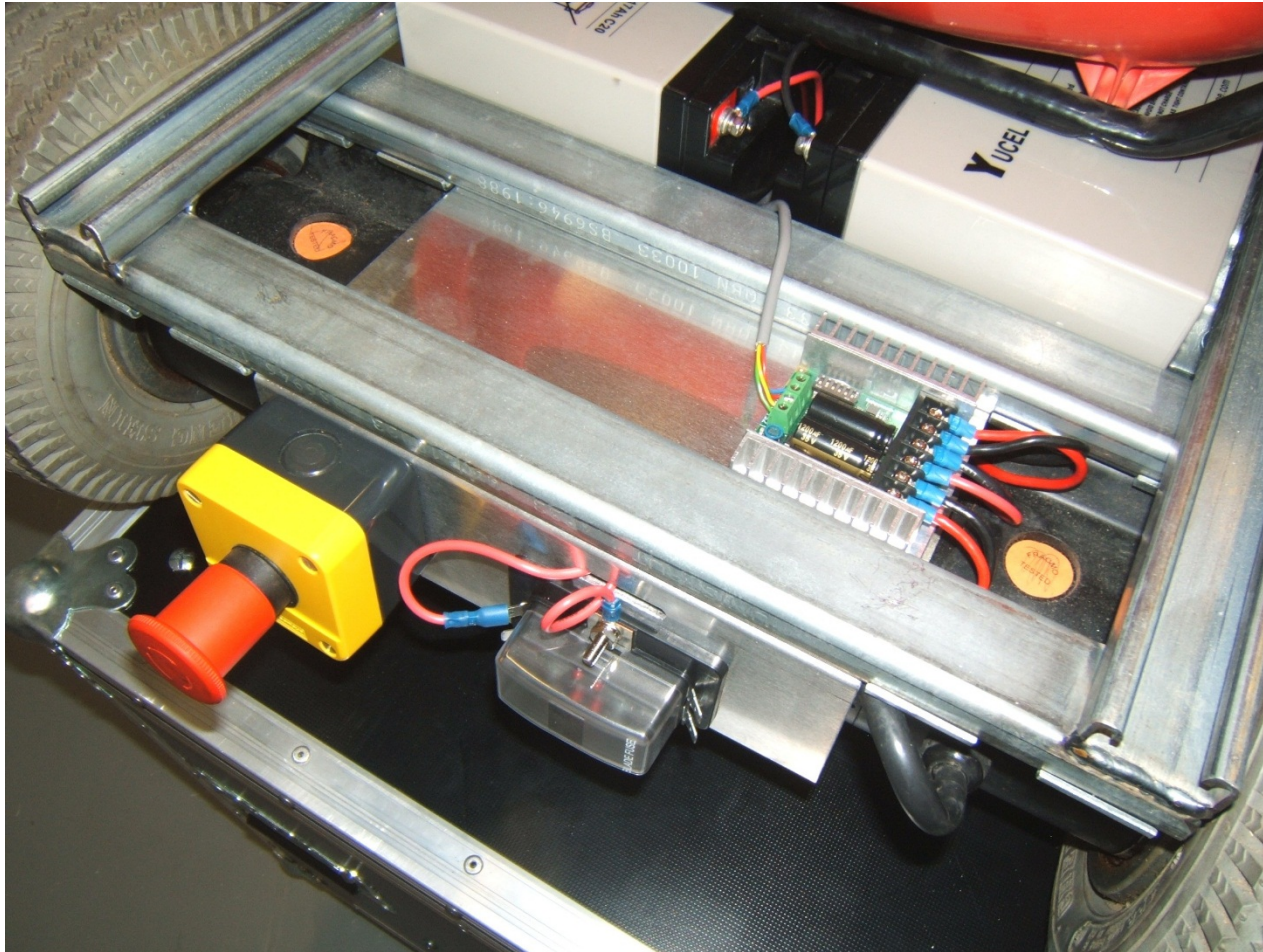




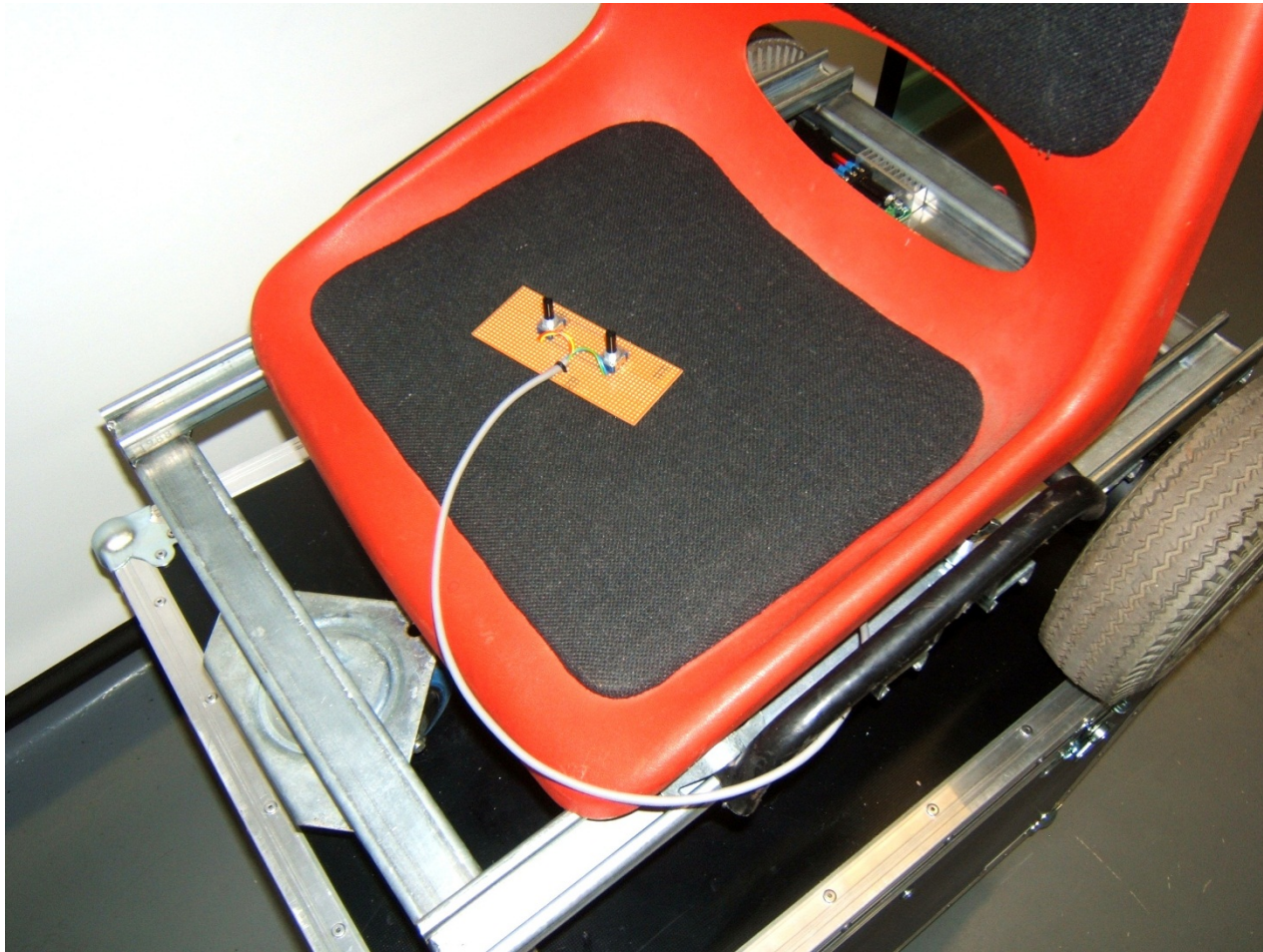
# Rear View



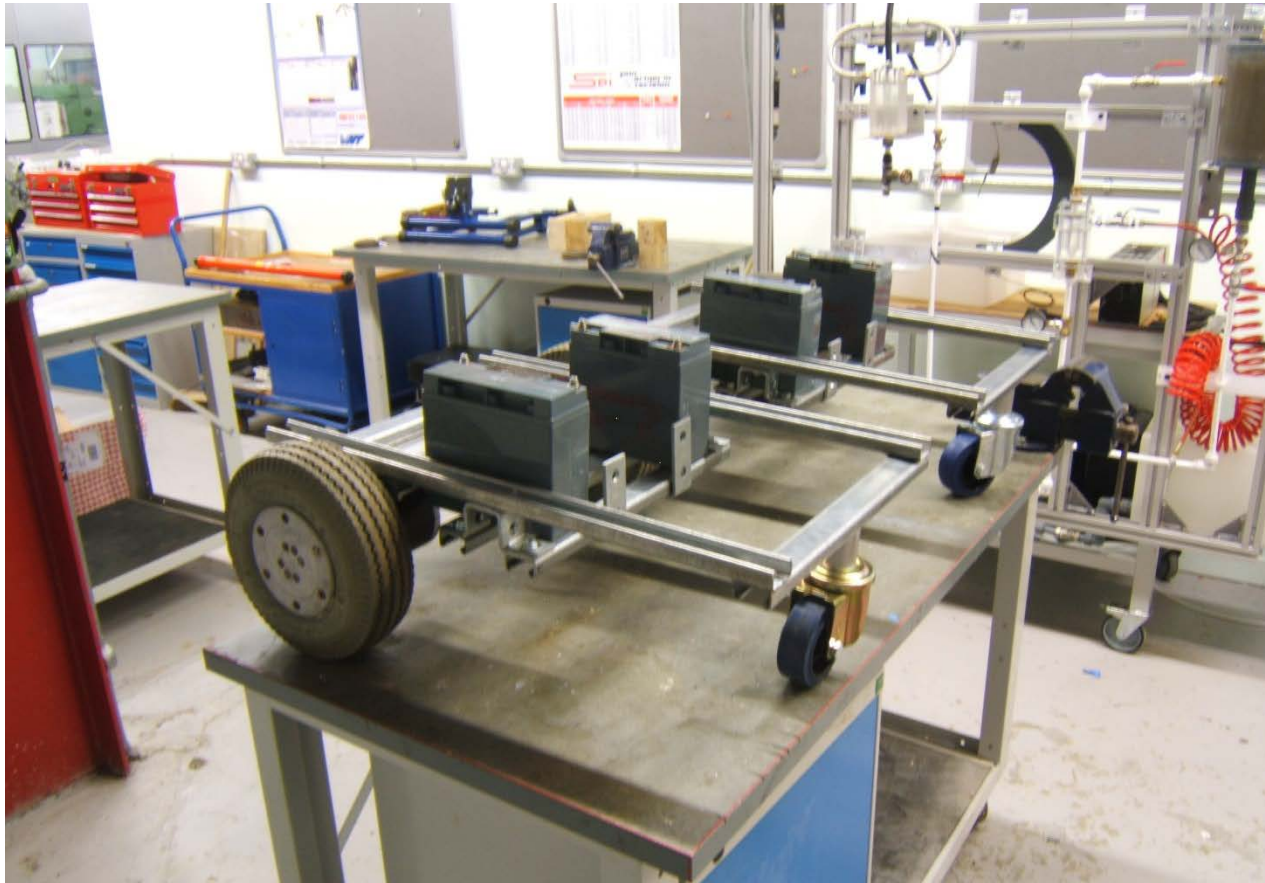
# Safety Cut-off and Motor Controller



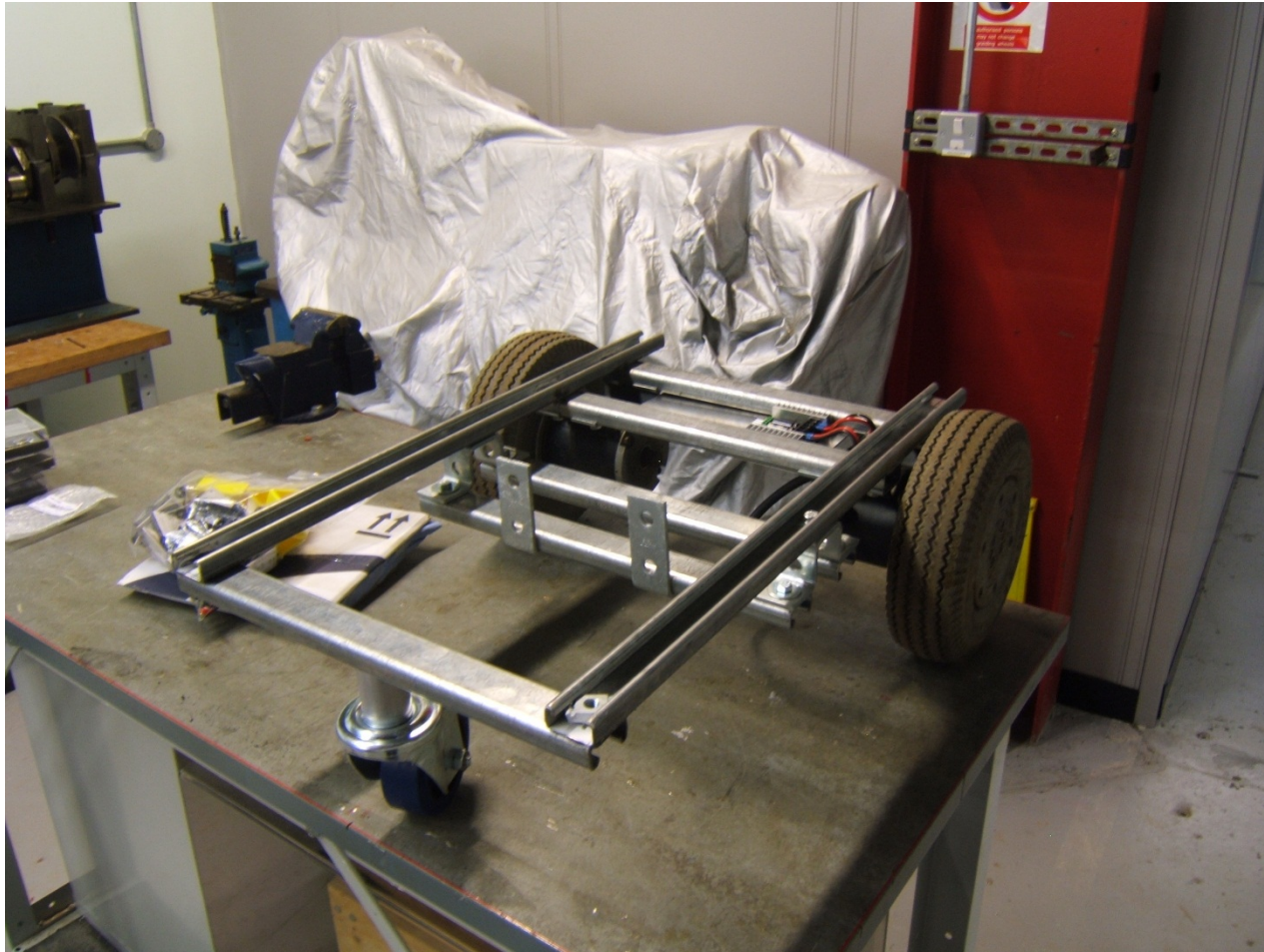
# Hand Controller



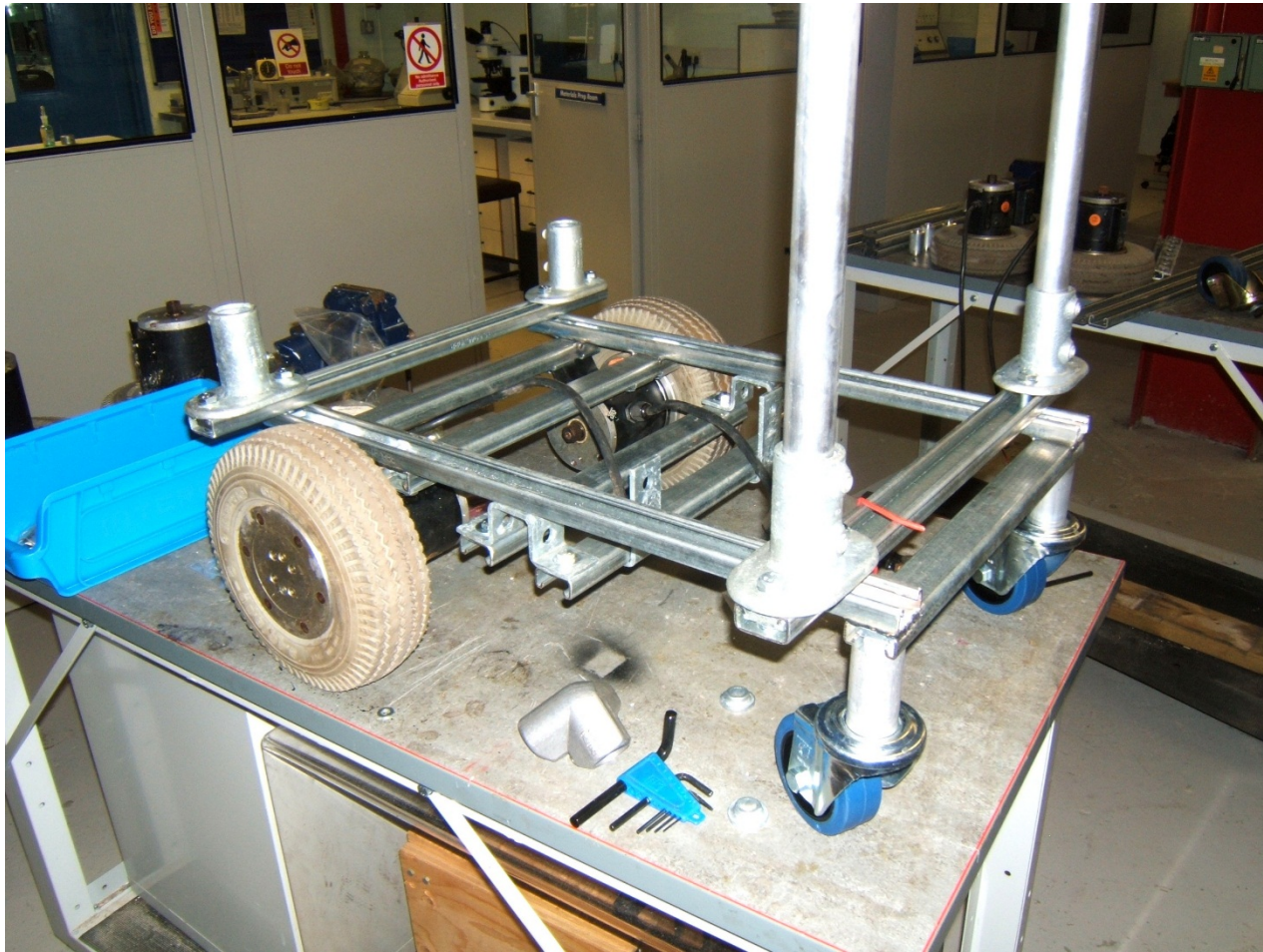
# The New Herd is Almost Ready To Go!



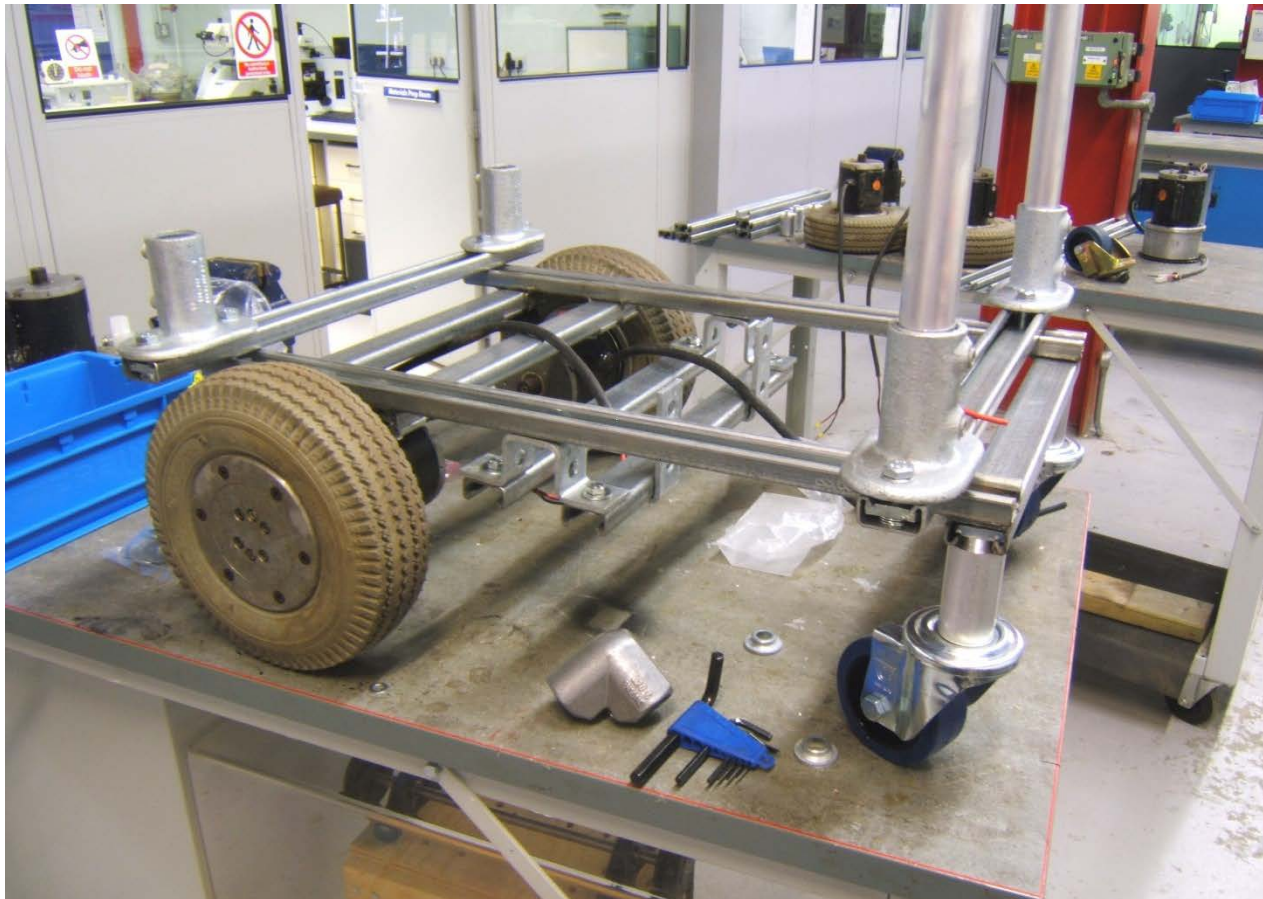
# Then There Were Three



# The Next Step-Up!



# Converting a Sit-on Cart to a Stand-on Cart

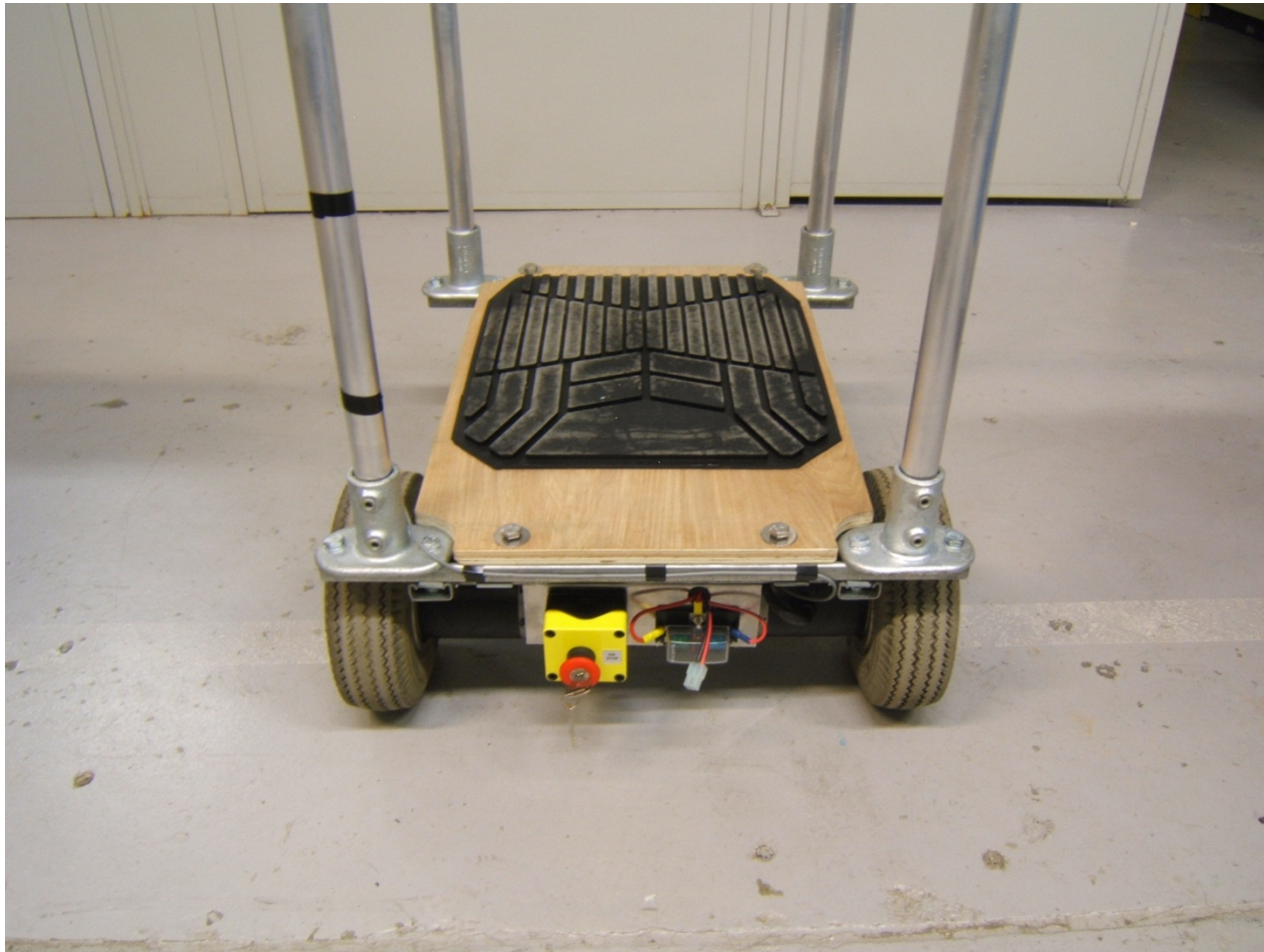


# The Finished System





# Two Safety Cut-outs



# The Future?



# It Just Needs Painting University Blue

