



CWSF 2006 - Saguenay, Québec



Casey Banner

Thoughts on 'Bots' 3: Quadruped Robotics

Division: Health Sciences
Category: Intermediate
Region: Pacific Northwest
City: Smithers, BC

School: Smithers Secondary

Abstract: A prototype quadruped robot was designed and constructed using servo,

pneumatic, and programmable microcontroller technology. The robot was used to design and test two contrasting walking gaits programmed in OOPic-Basic, using subroutines containing complex algorithms for improved efficiency. The "alligator-based" gait proved the most effective in

maintaining stability and speed.

Awards	Value
The University of Western Ontario Scholarship	\$1 500
Silver Medallist - \$1500 Entrance Scholarship	
Sponsor: University of Western Ontario	
Silver Medal - Engineering - Intermediate	\$700
Sponsor: Youth Science Foundation Canada	
Total	\$2 200



