

The PSYONIC-ROMP Collaboration: Providing Affordable, Advanced Prosthetic Hands in Quito, Ecuador

PSYONIC

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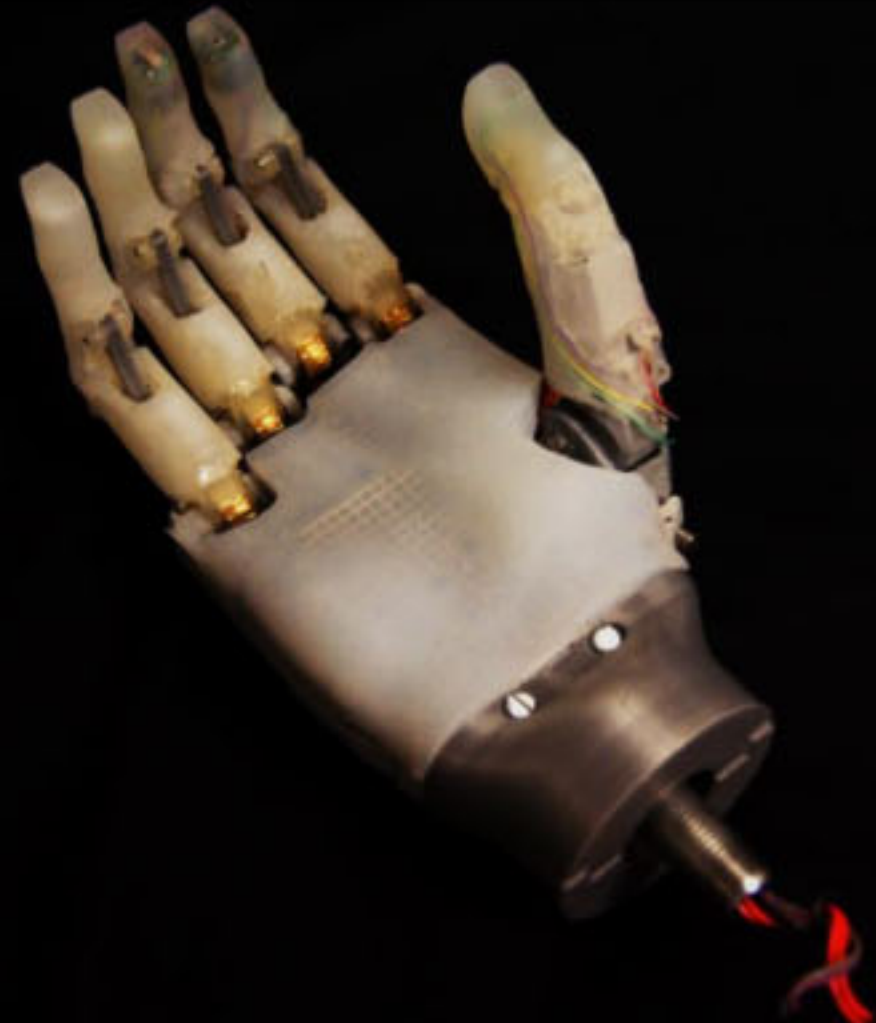
ROMP
Range of Motion Project

Problem

- State-of-the-art commercial prostheses cost between \$15000-\$30000
- They lack sensory feedback
- 80% of people with amputations come from developing nations, <3% have access to prosthetic care

Solution

- We have developed an affordable advanced bionic hand that is viable to use in Quito, Ecuador
- The hand can withstand blunt force impacts
- The hand has advanced motor control using EMG pattern recognition
- The hand has sensory feedback through pressure sensing and electrotactile stimulation



Project

- We will be conducting the first home trial of our advanced prosthetic hand with a patient with a below-elbow amputation in Quito, Ecuador

