

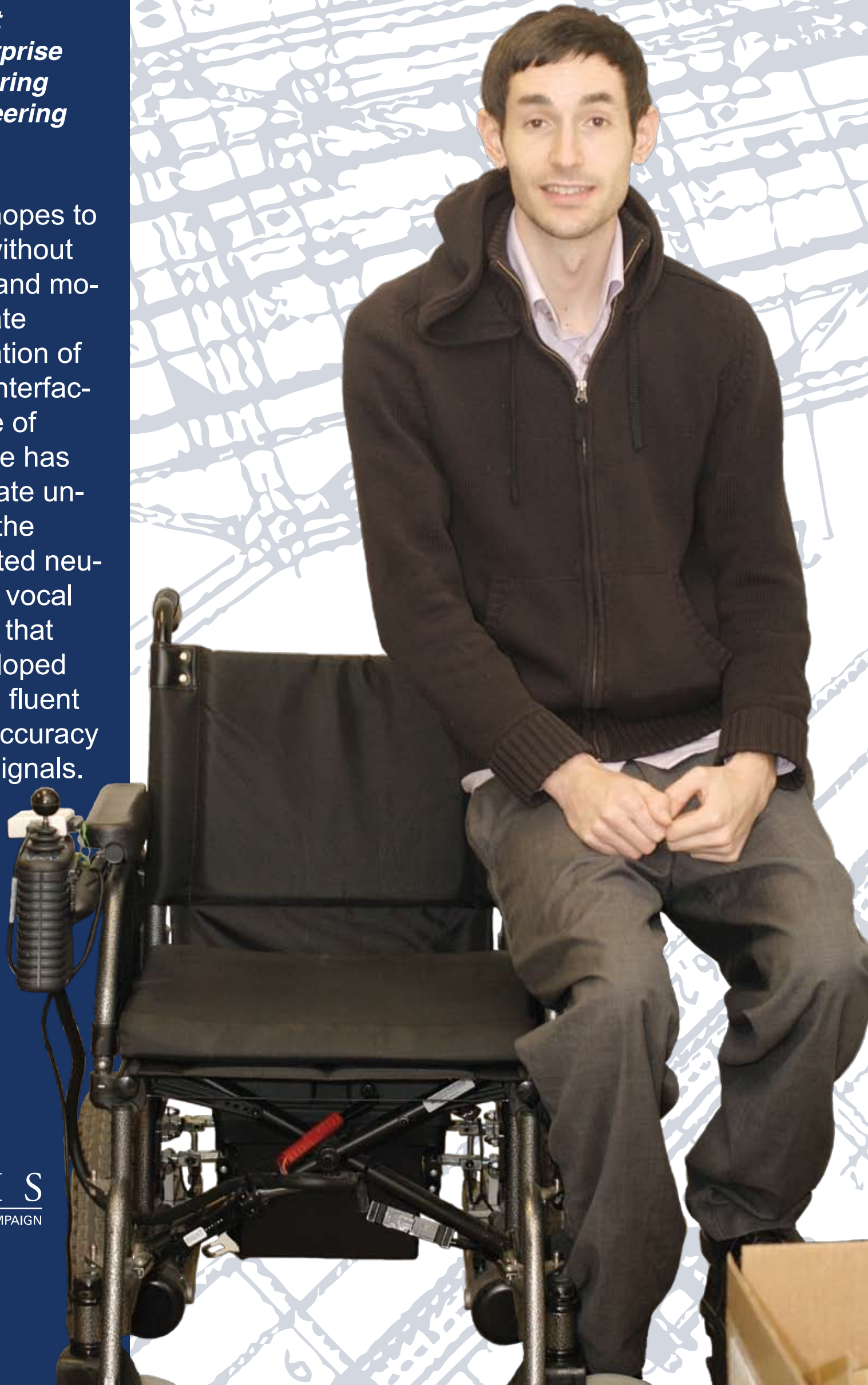
**Lemelson** ILLINOIS  
STUDENT PRIZE

*Finalist*

# MICHAEL CALLAHAN

*Graduate Student  
Industrial & Enterprise  
Systems Engineering  
College of Engineering*

Michael Callahan hopes to assist individuals without the use of speech and mobility to communicate through the application of neuroscience. By interfacing near the source of vocal production, he has been able to translate unspoken thought of the mind from intercepted neuronal activity at the vocal cords. The method that Callahan has developed produces complete fluent speech with 70% accuracy from neurological signals.



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