

# Troy Michael Bouman, PhD, MSE, MBA

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## EDUCATION

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- Doctor of Philosophy in Mechanical Engineering** May 2021  
Michigan Technological University, Houghton, MI  
Focus: Acoustics, Vibrations, and Dynamic Systems  
Awards: -Graduate School's Outstanding Scholarship Award  
-1st Place – Best Overall Paper at 2017 SAE Noise and Vibration Conference
- Master of Science in Mechanical Engineering** GPA: 3.89 May 2016  
Michigan Technological University, Houghton, MI  
Awards: -Outstanding Graduate Student Teaching  
-Best of Show Award at 2015 SAE Noise and Vibration Conference  
-Excellence in Noise Control from INCE 2016  
Certificate: LabVIEW Associate Developer
- Master of Business Administration** GPA: 3.95 April 2014  
Grand Valley State University, Grand Rapids, MI  
Beta Gamma Sigma International Honors Society  
Award: Dean's Citation for Academic Excellence  
Certificate: Managing Business, Government, and Public Policy, Washington, D.C.
- Bachelor of Science in Mechanical Engineering** GPA: 3.80 May 2012  
Michigan Technological University, Houghton, MI  
Minors: Electrical Engineering & General Music

## INDUSTRY EXPERIENCE

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- Bouman Acoustics LLC, Houghton, MI Fall 2013-Present  
**Owner/Principle - Supporting businesses with acoustic and vibration consulting services**
- Great Lakes Sound and Vibration, Houghton, MI Feb 2022-Sep 2024  
**Senior Engineer – Supporting government dynamic systems projects**
- Michigan Technological University, Houghton, MI May 2021-May 2023  
**Adjunct Assistance Professor – Teaching advanced courses in acoustics and signal processing**  
Award: Top 10% in university wide student evaluations spring 2022
- Roush Industries, Livonia, MI Summer 2016-Summer 2019  
**NVH Engineer – NVH consulting for a variety of customers in many sectors**  
Certificate: Recognition for extraordinary performance in 2017

## PUBLICATIONS

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- Bouman, T.** "Development of the Carbon Nanotube Thermoacoustic Loudspeaker", Open Access Dissertation, Michigan Technological University, 2021. <https://doi.org/10.37099/mtu.dc.etrdr/1204>
- Bouman, T., Barnard, A., Alexander, J.,** Continued Drive Signal Development for the Carbon Nanotube Thermoacoustic Loudspeaker Using Techniques Derived from the Hearing Aid Industry, *SAE NVH Conference Proceedings*, 2017.  
**First place paper in SAE NVC Best Student Paper Competition**
- Bouman, T., Barnard, A., Asgarisabet, M.,** Experimental quantification of the true efficiency of carbon nanotube thin-film thermophones, *Journal of the Acoustical Society of America*, 2016.

## RESEARCH

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- Michigan Technological University – Dr. Andrew Barnard 2014-2021  
**Research Assistant – Development of carbon nanotube thinfilm speakers**