Joby M. Anthony III, Ph. D. Candidate
Research Fellow
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https://jmanthony3.github.io

Research Expertise:
Physics-based programming, computational solid mechanics, finite element analysis, impact mechanics, kinematic analysis of crank-slider mechanisms, multiscale materials modeling, Integrated Computational Materials Engineering (ICME), high-performance computing, materials characterization, and programming for graphical user interfaces.

Education:

PhD	2025*	Liberty University, Mechanical Engineering, G.P.A. 3.66/4.0 Advisor: Mark Atwater
BS	2020	Liberty University, Mechanical Engineering, G.P.A. 3.2/4.0

Employment:

2020-present	Research Fellow, School of Engineering, Liberty University
2020	Special Projects Intern, Planning & Construction, Liberty University
2020	Laboratory Technician Supervisor, School of Engineering, Liberty University
2019	Engineering Intern, StallWorks/Virginia MetalFab
2017-2019	Laboratory Technician (3D Printing), School of Engineering, Liberty University
2017	Production Technician I, Event Productions, Liberty University
2016	Intern, Miles Architecture Group
2013-2019	Camera Operator, Freelance for WinterFest/KingsFest, Webstream/Tupelo Raycom, Program Productions, Liberty Flames Sports Network, Radford University, National Hotrod Association, ESPN, and Fox Sports

Honors/Awards:
Liberty University Montview Display Case for Expandable Containment Unit (2018)
Liberty University Research Week Undergraduate Oral Presentation 1st Place Applied Research (2017)

Program Development ($100):
1. Expandable Containment Unit ($100: 33%): provisional patent for design proposed at Liberty University Research Week 2017 (2018-2019)

Teaching Experience:
Liberty University: *School of Engineering*

Taught	ENGM	310	Materials Engineering	Spring 2023
Taught/Graded	ENGR	110	Fundamentals of Engineering	Fall 2022
Graded	ENGM	310	Materials Engineering	Spring 2022

Conferences/Seminars/Workshops Organized (2 total)
Symposium on "Integration of Experimentation and Modeling in Heterogeneous Microstructures by Precision Nanocrystallization", Materials Research Society, Boston, MS December 2022 (presented remotely)
Liberty University School of Engineering Graduate Students Conference (Summer 2022)

* In progress

Liberty University Academic Related Activities

2019 Engineering Summer Camp, *Liberty University School of Engineering:* setup and teach SolidWorks workshops and aid/guide construction of final project for middle school students from the surrounding Lynchburg area.

2018 Engineering Summer Camp, *Liberty University School of Engineering:* setup and teach SolidWorks workshops and aid/guide construction of final project for middle school students from the surrounding Lynchburg area.

Publications by Joby M. Anthony III (2 total, citation h-factor=1)

Ordered by Dates

Published Journal Articles (2 total)

2. Medina, H., **Anthony, J. M.**, and Eldredge, T., 2023, "Evaluating the Performance of Static Mixers Using the -Number: The Case of the Koflo® Mixer," Eng. Res. Express, **5**(1), p. 015026. https://doi.org/10.1088/2631-8695/acb9d6.
1. Eisenman, A., **Anthony, J.**, and Satagaj, D., 2017, "A Study in the Use of Elastic Materials in Expandable Containment Units," Montview Liberty University Journal of Undergraduate Research, **3**(1). [Online]. Available: https://digitalcommons.liberty.edu/montview/vol3/iss1/1.

Theses (1 total)

1. **Anthony III, Joby M.**, "From Frames to Strains: Analytically Modeling Inelastic Deformation Under Mapped Single-Site Impacts from High-Speed Footage to Internal State Variable Codes", Ph. D. dissertation, Liberty University, 2025 (in progress).

Patents (1)

1. Satagaj, David, and **Anthony III, Joby M.** Liberty University, 2018. *Expandable Containment Unit*. U.S. Patent Application 62657714