




## Aaron Brown

Ph.D. Student in Mechanical Engineering, admitted Autumn 2019

 Resume available Online

### Bio

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#### BIO

I am originally from Towson, Maryland, and did my undergraduate at Brown University in Providence, Rhode Island. I like baseball, running, and playing the piano!

#### INSTITUTE AFFILIATIONS

- Member (Student), Cardiovascular Institute

#### EDUCATION AND CERTIFICATIONS

- BS, Brown University , Mechanical Engineering (2019)

### Research & Scholarship

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#### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Engineering research with applications to energy/environmental sustainability.

### Publications

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#### PUBLICATIONS

- **A Modular Framework for Implicit 3D-0D Coupling in Cardiac Mechanics.** *Computer methods in applied mechanics and engineering*  
Brown, A. L., Salvador, M., Shi, L., Pfaller, M. R., Hu, Z., Harold, K. E., Hsiai, T., Vedula, V., Marsden, A. L.  
2024; 421
- **Computational approaches for mechanobiology in cardiovascular development and diseases.** *Current topics in developmental biology*  
Brown, A. L., Sexton, Z. A., Hu, Z., Yang, W., Marsden, A. L.  
2024; 156: 19-50
- **Recent advances in quantifying the mechanobiology of cardiac development via computational modeling.** *Current opinion in biomedical engineering*  
Brown, A. L., Gerosa, F. M., Wang, J., Hsiai, T., Marsden, A. L.  
2023; 25