



## Zinan Hu

Ph.D. Student in Mechanical Engineering, admitted Winter 2022

### Publications

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#### PUBLICATIONS

- **Multiphysics Simulations of a Bioprinted Pulsatile Fontan Conduit.** *Journal of biomechanical engineering*  
Hu, Z., Herrmann, J., Schwarz, E., Gerosa, F., Emuna, N., Humphrey, J., Feinberg, A. W., Hsia, T. Y., Skylar-Scott, M., Marsden, A.  
2025: 1-43
- **Investigation of a chronic single-stage sheep Fontan model.** *JTCVS open*  
Kelly, J. M., Hu, Z., Takaesu, F., Watanabe, T., Storrs, J., Blais, B., Yuhara, S., Morrison, A., Nelson, K., Ulziibayar, A., Heuer, E., Anderson, C., Jimenez, et al  
2024; 21: 268-278
- **Cardiovascular fluid dynamics: a journey through our circulation** *FLOW*  
Menon, K., Hu, Z., Marsden, A. L.  
2024; 4
- **IMPACT OF CARDIAC FIBER ORIENTATION ON ELECTRICAL DYSSYNCHRONY IN VENTRICULAR ECTOPY**  
Perkins, S. J., Salvador, M., Hu, Z., Tikenogullari, O., Kong, F., Narayan, S. M., Marsden, A.  
ELSEVIER SCIENCE INC.2024: 88
- **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