

**Hypersonic Atmospheric Reentry Deceleration Experiment (HARD-E)**  
(Technical Report)

**An Analysis of the Space Shuttle Challenger Disaster of 1986**  
(STS Research Paper)

An Undergraduate Thesis Portfolio

Presented to the Faculty of the  
School of Engineering and Applied Science  
University of Virginia, Charlottesville, Virginia

In Partial Fulfillment of the Requirements for the Degree  
Bachelor of Science in Mechanical Engineering

By

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