

Vita

Stephen Andrew (Andy) Sarles, youngest son of Randy and Kellan Sarles and younger brother of Ben, was born on September 11, 1982 in Princeton, West Virginia. He graduated from Princeton Senior High School as valedictorian of his class in May 2000. The following August, Andy enrolled at the University of Tennessee in Knoxville, TN to pursue a degree in mechanical engineering. He quickly adapted to college life and became part of Phi Sigma Kappa social fraternity as well as Tau Beta Pi. During his senior year, Andy joined Pi Tau Sigma and was also Engine Team leader for the Future Truck hybrid-electric vehicle program.

As an undergraduate, Andy spent two semesters co-oping for Adtran Inc., a telecommunications equipment company in Huntsville, Alabama. He also worked a summer for the West Virginia Department of Transportation and, during the spring of his senior year, he did undergraduate research at the National Transportation Research Center (NTRC) in Oak Ridge, TN. Andy graduated from the University of Tennessee in May 2004 and received Top Collegiate Scholars and Top Mechanical Engineering Graduate awards.

In August of 2004, he began working toward his Master's degree in mechanical engineering at Virginia Tech in Blacksburg, VA. Following one semester of being a graduate teaching assistant, Andy began working as a research assistant for Dr. Donald Leo, who he met and had gotten to know as a student in his *Smart Materials and Structures* class. Working with Dr. Leo in the Center for Intelligent Material Systems and Structures (CIMSS), Andy's research focused on using internal resistive heating to cause consolidation and curing in thermoset-coated carbon fiber composites.

Andy plans to pursue a Ph.D. in mechanical engineering following the completion of his Master's degree. He and Dr. Leo will once again team up to investigate self-healing materials from a systems and controls approach.