

## *James Alexander Norris*

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### **Education**

Virginia Polytechnic Institute and State University, Blacksburg, VA  
M.S. Mechanical Engineering QCA: 3.9/4.0 June 2003  
Thesis: Behavior of Magneto-Rheological Fluids Subject to Impact and Shock Loading  
B.S. Mechanical Engineering, Math Minor, Suma Cum Laude QCA: 3.8/4.0 May 2002  
Clemson University, Clemson, SC QCA: 4.0/4.0 Summer 2000  
National Science Foundation, Research Experiences for Undergraduates (NSF, REU)

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Thomas Jefferson High School for Science and Technology, (TJHSST), Sept. 1994 – Jun. 1998  
Alexandria, VA, GPA: 3.86 / 4.0

Mentorship: Applied Morphometrics Lab, National Museum of Natural History, Smithsonian Institution

### **Publications & Presentations**

Norris, J. and Ahmadian, M., "Behavior of Magneto-Rheological Fluids Subject to Impact and Shock Loading," **ASME International Mechanical Engineering Congress and Exposition**, Washington, DC, Nov. 16-21, 2003. Accepted  
Ahmadian, M., Appleton, R., and Norris, J., "Designing Magneto-Rheological Recoil Dampers in a Fire-out-of Battery Recoil System," **IEEE Transactions on Magnetics**, Vol. 39, No. 1, pp. 480-485 Jan. 2003  
Ahmadian, M., Appleton, R., and Norris, J., "An Analytical Study of Fire out of Battery using Magneto Rheological Dampers," **Shock and Vibration Journal**, Vol. 9, No.3, pp. 129-142. Jun. 2002  
Norris, J., "Design of an Anti-lock Brake Control Scheme & Description of the Thermal Behavior of a 20 hp Engine," summary of summer research under Dr. John R. Wagner, Department of Mechanical Engineering, Clemson University. Aug. 2000

### **Employment**

Virginia Tech, Department of Mechanical Engineering Aug. 2002 - Present  
Graduate Teaching Assistant (GTA)  
Virginia Tech, Department of Mechanical Engineering Summer 2001  
Undergraduate Research Assistant, Advisor: Dr. Mehdi Ahmadian  
Clemson University, Department of Mechanical Engineering Summer 2000  
Undergraduate Research Program, Anti-lock Brake Control Scheme Design

### **Honors and Awards**

Virginia Polytechnic Institute and State University  
Thomas Watkins Drewry Scholarship 2001-2002 Academic Yr.  
Gilbert and Lucille Seay Scholarship 1999-2000 Academic Yr.  
Dean's List: College of Engineering Spring 1999, Fall 1999, Spring 2000, Fall 2000  
Dean's List w/Distinction: College of Engineering Fall 1998, Spring 2001, Fall 2001, Spring 2002  
Marshall Hahn Engineering Scholarship 1998-1999 Academic Yr.  
Eagle Scout, Boy Scouts of America, Troop 1523 Feb. 1998

### **Extracurricular Activities**

Road and Mountain Bike Racing, Virginia Tech Cycling Team Jan. 1999 – Present  
President 2002 – 2003 Season  
American Society of Mechanical Engineers, Member Nov. 1999 - Present  
SCUBA diving, SSI Assistant Instructor / Divemaster Certification, Nov. 1999 Jun. 1993 - Present  
Outdoor Activities: Backpacking, Snowboarding, Caving, and Surfing