SUMMARY CV: JASON A. RONEY TEACHING ASSOCIATE PROFESSOR MECHANICAL AND MATERIALS ENGINEERING



## **Educational Background**

Ph.D., Mechanical and Aeronautical Engineering, University of California at Davis, 2001

2155 E Wesley Ave Denver CO 80208-1500 303/871-2252

M.S., Mechanical Engineering, Arizona State University, 1997

B.S., Mechanical Engineering, University of Colorado at Boulder, 1994

## Professional Experience

Dr. Roney is currently a Teaching Associate Professor of Mechanical and Materials Engineering. Dr. Roney joined the University of Denver (DU) in Autumn 2014. Prior to joining DU, Dr. Roney held both industry and academic positions. In addition, Dr. Jason Roney is a Wind Consultant and Environmental Transport expert. His current research and consulting interests are in the areas of atmospheric modeling for air quality, wind and renewable energy, near-space atmospheric modeling and observations, fugitive dust modeling, environmental fluid dynamics, the atmospheric boundary layer, aerosols, two-phase flows, and boundary layer flows.

Dr. Roney was a Senior Research Engineer/Scientist at Exelis/ITT from 2007-2014 where he worked primarily on DoD research related to modeling and simulation of CBRN (Chemical Biological Radiological and Nuclear) Defense. Projects involved such topics as atmospheric transport and dispersion, CFD analysis, and aircraft hardness analysis. Research sponsors included the Air Force Nuclear Weapons Center (AFNWC), Defense Threat Reduction Agency (DTRA), Edgewood Chemical and Biological Center (ECBC), Defense Advanced Research Projects Agency (DARPA), and ITT Internal Research and Development (IRAD).

Dr. Roney was an Assistant Professor of Mechanical and Aerospace Engineering at the University of Colorado at Colorado Springs (UCCS) from 2002-2007. Dr. Roney taught courses in undergraduate fluid mechanics, mechanical engineering lab, and graduate fluid mechanics (CFD, Viscous Flow, and Environmental Fluid Dynamics). In addition, Dr. Roney worked on research in such areas as air quality modeling, Near Space wind modeling, wind energy, and boundary layers. Research sponsors included NASA, NISSC (AFOSR), USAFA (AFOSR), Air Force Space Command, and the Army Space Battle Lab.

Dr. Roney worked at Sonoma Technology, Inc., from 2001-2002 as a modeler and atmospheric modeler simulating ground-level ozone and particulate matter for various air quality district clients.

## **Memberships**

American Meteorological Society, Air and Waste Management Association, American Geophysical Union, American Society of Mechanical Engineers, American Society for Engineering Education, American Institute of Aeronautics and Astronautics, Society of Hispanic Professional Engineers

## Awards

Tau Beta Pi Engineering Honor Society

GEM Fellowship (1995-1996)

Ford Foundation Predoctoral Fellowship Honorable Mention (1997)

Department Nomination for DU RSECS Teacher of the Year Award (2017, 2018)