

EDUCATION

Master of Environmental Science and Management (Expected June 2010)

Corporate Environmental Management Specialization

Bren School of Environmental Science & Management – University of California, Santa Barbara

Thesis Group Project: Partnering with AECOM; assessing the feasibility of a strategic combination of greenhouse gas (GHG) reduction options in the city of Ventura, CA; authoring software to assist city managers across California recreate similar results; conducting GIS analyses of renewables; acting as scientific lead and website manager (March 2009 – Present)

Involvement: Assistant Researcher, Holden Laboratory – Marsh Water Quality Studies

Bachelor of Science with distinction in Geographic Science (May 2008)

Integrated Science and Technology Minor/Environmental Science Concentration

James Madison University (JMU) – Harrisonburg, VA

Senior Honors Thesis (SHT): "Investigating Marine Algal Blooms as a Renewable Energy Source"
Original theoretical work tying MODIS satellite data and bomb calorimetry work together for estimating potential energy of renewable biodiesel from marine algae; won best Geographic SHT

Leadership: Speaker/Head Coordinator – ecoSymposium; Project Leader/Coordinator – Green Fund (passed student initiative to raise funds for sustainability); Social Director/Website Author – Geography Club; Coordinator/Website Creator – JMU Green Team; Featured Graduating Science Student – JMU STEM Video Website; Staff Photographer – Collegiate Times/The Breeze

INTERNSHIP EXPERIENCE

AECOM Environment, Santa Maria, CA

Environmental Analyst Intern (May 2009 – Present)

- Conduct utility GHG inventory for Los Angeles Community College District (LACCD), Vandenberg Air Force Base (VAFB) air compliance, and GHG abatement strategy design

NASA (National Aeronautics and Space Administration), Hampton, VA

GIS Intern (June 2008 – August 2008)

- Supported GIS and ArcIMS needs for the Langley Research Center and Johnson Space Center
- Directed by the Virginia Space Grant Consortium Program

Center for Energy and Environmental Sustainability, JMU, Harrisonburg, VA

Research Intern (May 2007 – September 2007)

- Researched possible uses for excess poultry litter produced in the Shenandoah Valley
- Conducted GIS analysis of travel and break-even transport distances for fertilizer

Institute for Infrastructure and Information Assurance, JMU, Harrisonburg, VA

Research Intern (May 2007 – September 2007)

- Migrated container GIS to open-source software; researched available open-source GIS solutions

PRESENTATIONS

- California AEP Graduate Student Showcase. 2nd Place. Algal Biodiesel as a Renewable Fuel (3/09)
- Virginia Innovation Showcase. A Geographic Information System for Simulating International Container Movement (GISSCM) (11/07)
- COVES: Commonwealth of Virginia, Energy and Sustainability Conference. Poultry Litter Life Cycle Issues in the Shenandoah Valley (10/07)
- Institute for Infrastructure and Information Assurance Research Review Symposium. Poultry Litter in the Shenandoah Valley: A Renewable Resource (9/07)

SKILLS AND INTERESTS

Instrumentation Experience: Ion Chromatograph, Nikon C1 Confocal Laser Scanning Microscope, Spectrophotometer, Hemocytometer, Bomb Calorimeter, Waterproof Conductivity Meter Kit, Plant Growth Chamber

Computer Skills: Mac OS X, Linux, Windows, ArcGIS 9.3, QGIS, ERDAS Imagine, Nikon NIS Elements AR, Microsoft Office, Adobe CS3 Suite, Apple iWork, REALBasic, Website Design

Interests/Distinctions: Eagle Scout, Order of the Arrow, Geographic Science Service Award