CURRICULUM VITÆ

Cameron Bracken

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EDUCATION

M.S.	**University of Colorado at Boulder**: Civil, Environmental and Architectural Engineering, Department of Hydrology, Water Resources, and Environmental Fluid Mechanics, 2011
	Thesis: "Seasonal to Inter-Annual Streamflow Simulation and Forecasting on the Upper Colorado River Basin and Implications for Water Resources Management"
B.S.	**Humboldt State University**: Environmental Resources Engineering, 2009
B.S.	**Humboldt State University**: Applied Mathematics, 2009

EXPERIENCE

2009 - 2011	Graduate Research Assistant Center for Advanced Decision Support for Water and Environmental Systems
2008	Student Researcher, National Weather Service, Eureka CA
2007	Student Researcher, Environmental Fluids Research Experience for Undergraduates, University of Colorado at Boulder

RESEARCH INTERESTS

Stochastic Hydrology, Time series modeling, Forecasting,

TEACHING & TUTORING

Fall 2009	Lead TA ENGR 4333: Engineering Hydrology.
2004 – 2011	Various private tutoring, Algebra – Calculus III.

AWARDS

Department Fellow, Civil, Environmental and Architectural Engineering, 2009 - Present

Best Undergraduate Research Project, Humboldt State University, Spring 2009

Homer Arnold Award in Applied Engineering for outstanding achievement in applied engineering design involving environmental and resource problems, Humboldt State University, Spring 2009

Roscoe-Schneller Award for outstanding potential in Environmental Resources Engineering, Humboldt State University, Spring 2007 ($500).

Robert S. Chambers Award for academic achievement in mathmatics, Humboldt State University, Spring 2007 ($500).

Honorable mention, 2007 COMAP Mathematical Contest in Modeling (MCM).

Honorable mention, 2008 COMAP Mathematical Contest in Modeling (MCM).

PUBLICATIONS

Bracken, C., B. Rajagopalan, and E. Zagona (2011), A Nonstationary Hidden Markov Model for Stochastic Streamflow Simulation and Short Term Forecasting in the Upper Colorado River Basin, *Submitted to Water Resour. Res.*

Bracken, C., E. Zagona, B. Rajagopalan. A New Probabilistic Model for Reservoir Operations in the Upper Colorado River Basin, *Submitted to Journal of Hydrology.*

Bracken, C., B. Rajagopalan, and J. Prairie (2010), A multisite seasonal ensemble streamflow forecasting technique, Water Resour. Res., 46, W03532, doi:10.1029/2009WR007965.

SOFTWARE

Charlie Sharpsteen and Cameron Bracken (2011). *tikzDevice: A Device for R Graphics Output in PGF/TikZ Format.* R package version 0.6.1.

Cameron Bracken and Charlie Sharpsteen (2011). *pgfSweave: Quality speedy graphics compilation and caching with Sweave.* R package version 1.2.1.

PRESENTATIONS

A Nonstationary Hidden Markov Model for Stochastic Streamflow Simulation and Inter-annual Forecasting in the Upper Colorado River Basin, AGU Fall Meeting 2011, H51N. Medium- to Long-Range Water Resources Forecasting from Regional to Global Scale, Dec. 9, 2011.

Large Scale Hydrology and Water Resources in the Upper Colorado River Basin. Guest Lecture, Mountain Geography, May, 2011.

Interannual Forecasting of Upper Colorado River Flow. Poster presented at the Hydrologic Sciences Symposium, University of Colorado at Boulder, March 13 2011.

Reclamation Review of Stochastic Streamflow Simulation at Interannual and Interdecadal Time Scales and Implications to Water Resources Management: Project overview. Presented at the Seasonal to Year-Two Colorado River Streamflow Prediction Workshop, Colorado Basin River Forecast Center, Salt Lake City, Utah, March 21, 2011

Experiences with Policy Development and Forecasting for the Midterm Probabilistic Model. Presented at the RiverWare Users Group Meeting, Febrary 11th, 2010.

Reclamation Review of Stochastic Streamflow Simulation at Interannual and Interdecadal Time Scales and Implications to Water Resources Management: Past, Present and Future Work. Presented to the Colorado River Basin Hydrology Working Group, October 5th, 2009.

The wonderful world of R. Seminar, Humboldt State Unversity, 26 February 2009

What the heck is LATEX? Seminar, Humboldt State University, September 18 2008

A Multi-Site Streamflow Forecast Framework: Application to the Upper Colorado River Basin. AGU Fall Meeting H32E: Using Climate Information for Forecast Applications in Hydrology, Water and Energy Management, and Other Sectors II, August 9, 2007.

January 5, 2012