

CONTACT INFORMATION	University of Maryland, College Park College of Computer, Mathematical, and Natural Sciences Department of Mathematics College Park, MD 20742	Email: tsingl@math.umd.edu http://www.math.umd.edu/~tsingl Voice: 301.405.8709
EDUCATION	Ph.D., Applied Mathematics and Scientific Computing University of Maryland, College Park Advisors: Eugenia Kalnay & Kayo Ide Dissertation: <i>A Data Assimilation Study for a Simple Coupled Atmosphere-Ocean Model</i>	2011
	M.S., Mathematics Tulane University	2005
	B.S., Mathematics Cum Laude Dillard University	2002
WORK EXPERIENCE	University of Maryland, College Park College of Computer, Mathematical, and Natural Sciences	
	Assistant Director for Recruitment and Co-Curricular Programs	2010 2007-2009
	Grant Coordinator	2007-2009
	Program Coordinator , Department of Mathematics - Math Summer Program in Research and Learning (SPIRAL)	
	Graduate Assistant for Diversity	2006-2007
TEACHING EXPERIENCE	University of Maryland, College Park Instructor - College of Computer, Mathematical, and Natural Sciences	2008-2009
	Tulane University Teaching Assistant – Department of Mathematics (Calculus I – III and Statistics)	2002-2005
RESEARCH INTERESTS	Data assimilation, ensemble kalman filtering, applied mathematics, scientific computing, numerical and mathematical modeling	
RESEARCH EXPERIENCES	NASA Goddard Space Flight Center - Mesoscale Atmospheric Processes Branch <i>Topic: Role of Gravity Waves in Determining Cirrus Cloud Properties</i>	2006 – present
	National Center for Atmospheric Research, Boulder, CO	
	Institute for Mathematics Applied to Geosciences (IMAGE) <i>Topic: Investigating diurnal and semidiurnal tides using statistical models</i>	2005

High Altitude Observatory 2004
Topic: Investigating the temperature variability of the middle and upper atmosphere using NASA SABER and NCAR TIME-GCM

High Altitude Observatory 2003
Topic: Comparisons of temperature variations in the Earth's Mesopause

Atmospheric Chemistry Division 2002
Topic: Optimal representation of spectral lines

Atmospheric Chemistry Division 2001
Topic: Investigating carbon monoxide levels in the stratosphere using infrared spectroscopy

Tulane University Louisiana Alliance for Minority Participation

School of Science and Engineering 2000
Topic: Solving Differential Systems Describing Fluid Motion during Solidification in Manufacturing Processes

School of Public Health and Tropical Medicine 1999
Topic: Mixture Effects of 2,4-Dichlorophenoxyacetic Acid (2,4D) and Monosodium Methanearsonate (MSMA)

HONORS and AWARDS

National Aeronautics Space Administration (NASA)
 Graduate Student Researchers Program Fellowship 2007-2010
 Student Ambassador 2009 - present
 Harriett Jenkins Pre-doctoral Fellowship 2005-2007

Dillard University
 Alfred Chisholm United Negro College Fund (UNCF) Scholar
 Dillard University College of Natural Sciences Dean Scholar
 Dillard University Most Outstanding Student in Mathematics
 Louisiana Alliance for Minority Participation Scholar

COMPUTERS

Operating Systems: OS X, Windows, Unix/Linux, Cygwin
Programming Languages: Fortran, C, C++, Interactive Data Language (IDL), and HTML
Computational Software: R Statistical Package, Grid Analysis and Display System (GrADS), Mathematica, Maple, Matlab
Applications Software: LaTeX, Microsoft Office
Editors: vi, emacs, pico
Internet Programs and Protocols: Internet Explorer, Mozilla Firefox, SSH Secure Client, Putty

WORKSHOPS and TRAINING	Pennsylvania State University/University of Maryland College Park Ensemble Kalman Filter Data Assimilation Workshop (College Park, MD)	2009
	World Weather Research Program (WWRP) The Observing System Research and Predictability Experiment (THORPEX) Workshop on 4D-Var and Ensemble Kalman Filter Inter-Comparisons (Buenos Aires, Argentina)	2008
	National Center for Atmospheric Research Institute for Mathematics Applied to Geosciences (IMAGE) Data Assimilation for the Carbon Cycle Workshop	2007
	Princeton University Institute for Advanced Study Mathematical Biology Program for Women and Mathematics	2003
INVITED TALKS and PRESENTATIONS	SIAM Annual Meeting – Workshop Celebrating Diversity, Pittsburgh, PA	2010
	American Meteorological Society Conference, Phoenix, AZ	2009
	International Commission on Clouds and Precipitation Conference, Cancun, Mexico	2008
	NASA Scholars Pursuing Academic and Career Excellence Symposium, Cleveland, OH	2007
	NASA Scholars Pursuing Academic and Career Excellence Symposium Huntsville, AL	2006
	American Geophysical Union Fall Meeting San Francisco, CA	2004
	Western Pacific Geophysics Meeting, Honolulu, HI	2004
	Coupling, Energetics, and Dynamics of Atmospheric Regions (CEDAR) Sante Fe, NM	2004
	Hawaii International Conference on Sciences, Honolulu, HI	2004
Society for Advancement of Chicanos and Native Americans in Science Annual Conference	2003	
PROFESSIONAL ACTIVITIES	Member, University of Maryland Weather Chaos Group	
	Member, AMSC Student Council (2009-2010)	
	Member, SIAM UMD Student Chapter	
	Member, Association for American University Women (AAUW)	

Member, University of Maryland Women in Mathematics

Reviewer, NASA Motivating Undergraduates in Science and
Technology Scholarship Program