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WeatherFlow, Inc.  
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## **EDUCATION**

Ph.D. Atmospheric Science, Colorado State University, Fort Collins, 1994  
M.S. Atmospheric Science, University of California, Los Angeles, 1989  
B.Sc. Physics, McGill University, Montreal, 1986

## **SECOORA EXPERIENCE**

**2019-present** Member of F&A Committee  
**2016-2021** Member of Executive Committee (Vice-Chair, Secretary)  
**2015-2021** Board Member

## **PROFESSIONAL EXPERIENCE**

### ***Since 2013 Chief Scientist, WeatherFlow Inc., Fort Collins, CO***

Provides scientific and technical guidance for all WeatherFlow programs and projects. Oversees cloud-based forecasting system that integrates data from the WeatherFlow Tempest global network (40,000+ stations) with AI forecast system available via mobile app. Developed machine learning models to produce improved point forecasts based on NWP and observational data. Designed and implemented operational data quality control systems for surface and upper-air observations. Manage NWP and Data Assimilation team that produces real-time forecasts for several dozen coastal regions in the U.S. and in other countries.

### ***2006-2013 Chief Scientist, Science and Technology in Atmospheric Research (STAR) Institute, Boulder, CO***

Chief Scientist for the Pentagon Shield project Building Protection System (transferred from NCAR in 2006). Implemented and optimized an integrated multi-scale wind analysis system that combined data from NWP models and Doppler radar and lidar wind retrieval systems to support transport and dispersion modeling.

### ***2004-2013 Project Scientist II, National Center for Atmospheric Research, Research Applications Laboratory, Boulder, CO***

Managed project schedules, deliverables, budgets, and reporting. Developed strategies to prioritize tasks among diverse components of scientifically and technically challenging projects. Organized, coordinated, and directed the allocation of project staff and resources to accomplish project objectives. Integrated research activities with operational development and deployment. Planned and executed observational field campaigns. Participated in proposal grant submissions.

Project Lead for the Global Climate Analysis Toolkit project that produces high-resolution WRF input data for use by air quality and transport and dispersion models. Developed artificial neural network techniques to automatically identify weather patterns and frequency of occurrence from high-resolution climate re-analysis.

**2000-2004 Scientist/Engineer, Mission Research Corporation, Fort Collins, CO**

Duties included research and development to improve boundary layer wind forecasts in mesoscale NWP models and to provide uncertainty estimates with primary application for input into transport and dispersion models.

**1996-2001 Project Leader/Scientist, National Institute of Water and Atmospheric Research (NIWA), Wellington, NZ**

Project leader of interdisciplinary team that conducted research into coupled atmospheric-hydrologic processes in regions of complex terrain.

**1994-1996 Electric Power Research Institute Postdoctoral Fellow, U.S. Geological Survey, Lakewood, CO**

Primary responsibilities were to integrate mesoscale models to drive Water Resource Division's snowpack melt/runoff models.

**1989-1994 Graduate Research Assistant, Colorado State University, Fort Collins, CO**

Ph.D. dissertation title: *Impact of soil moisture and vegetation change on July 1989 climate using a regional climate model.*

**PUBLICATIONS & PRESENTATIONS**

Available upon request.