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Curriculum Vitae
Joseph Mark Veneziano
Red Sky Weather Service, LLC

SUMMARY OF EXPERTISE

Mr. Veneziano is a seasoned meteorologist, analyst and application developer with over twenty-five years of professional experience, and advanced scientific degrees in meteorology, physical oceanography and applied mathematics. He is noted for his analytical and scientific acumen, resourcefulness, self-motivation and dedication in all aspects of meteorological forecasting, oceanographic analysis, scientific analysis and computer application development. Mr. Veneziano's exceptional written, verbal and interpersonal communication skills enable him to effectively and concisely relay his scientific and technical knowledge to any audience. His areas of expertise include:

- Meteorology, oceanography and climatology data analysis, operational assessment and forecasting
- Marine meteorology and physical oceanography
- Geographic Information Systems; mapping, spatial analysis, database design
- Meteorology focused application development
- Computer programming;
 - Advanced Expertise: JAVA, KML, SQL, ArcObjects, PHP, MATLAB, Visual Basic, HTML
 - Mid-Level Expertise: .NET, JavaScript, Jscript, LINUX, XML, Fortran, MicroSoft Office Development
 - Working Knowledge: Adobe Flex, C++, C#, BASH
- Data mining and dynamic web content application and portal development
- Environmental spatial mathematical modeling

PROFESSIONAL EXPERIENCE

Red Sky Weather Service, LLC, Norfolk, VA
Owner and Chief Meteorologist, 2003 – Present

- Developed company specializing in
 - Meteorology consulting
 - Historical weather and climatology data analysis and assessments
 - Meteorology focused computer application development
 - Geographic Information System (GIS) mapping and spatial analysis

Significant projects include

- **Civil Litigation**
 - **Client:** Midkiff, Muncie & Ross, P.C., Richmond, Virginia
 - **Project:** Winter weather analysis, temperature and precipitation, in support of slip and fall accident.
 - **Client:** The Conrad Firm, Richmond, Virginia

- **Project:** Comprehensive 42 month historical weather analysis for site in Suffolk, Virginia. Project involved mapping site of interest, building GIS map products, and performing in depth spatial analysis of wind, precipitation and temperatures at the site of interest.
- **Client:** District Attorney, Colusa County, California
 - **Project:** Conducted a twenty-three day detailed weather analysis for site in Colusa County, California in support of animal abuse case. Project involved spatial analysis of temperatures, winds and precipitation to support water evaporation determination for livestock water trough.
- **Client:** Private Individual
 - **Project:** Analyzed severe weather event which occurred in San Francisco in December 2006 in support of civil litigation case. Project involved spatial analysis of sustained winds and wind gusts, and analysis of Doppler Weather Radar archive for precipitation event.
- **Client:** Williams Mullen, Willmington, North Carolina office
 - **Project:** Vertical wind analysis in support of roof loss at Carolina Beach, North Carolina during Hurricane Hanna (2008)
- **Client:** Maupin Taylor, P.C., Wilmington, North Carolina
 - **Project:** Vertical wind analysis in support of roof loss at Kure Beach, North Carolina, during Hurricane Ophelia (2005).
- **Client:** Taylor and Walker, P.C., Norfolk Virginia
 - **Project:** Wind and precipitation analysis in support of civil case concerning damage to Doubletree Hotel, Norfolk Airport during Hurricane Isabel (2003).
 - **Project:** Wind analysis in support of civil case concerning damage to NTELOS Harbor Pavilion, Portsmouth, Virginia during Hurricane Isabel (2003).
 - **Project:** Marine weather analysis in support of civil case concerning damage to barge in Thimble Shoal Channel, lower Chesapeake Bay.
- **Client:** Zwerling, Leibig and Moseley, P.C., Arlington, Virginia
 - **Project:** Weather analysis in support of murder trial.
- **Client:** Breeden, Salb, Beasley & Duvall PLC Norfolk, Virginia
 - **Project:** Weather analysis in support of slip and fall accident.
- **Client:** Data Check Systems, Greensboro, North Carolina
 - **Project:** Weather analysis in support of slip and fall accident at Elizabeth, New Jersey.
 - **Project:** Weather analysis in support of slip and fall accident at Catskill, New York.
 - **Project:** Weather analysis in support of slip and fall accident at Princeton, New Jersey.
- **Client:** Kalbaugh, Pfund & Messersmith, Richmond, Virginia
 - **Project:** Weather Analysis in support of slip and fall accident at Colonial Heights, Virginia.
- **Client:** Kutak and Rock LLP Denver, Colorado
 - **Project:** Wind analysis for Eagle, Colorado.
- **Client:** McGuire Woods Norfolk, Virginia
 - **Project:** Precipitation analysis for accident at Yale, Virginia.
- **Client:** The Travelers, Law Offices of Mark J. Beachy, Richmond, Virginia
 - **Project:** Precipitation; snowfall and rainfall, wind, temperature and evaporation analysis for slip and fall accident at Midlothian, Virginia
 - **Project:** Weather analysis; snowfall and rainfall, temperature and winds for slip and fall accident, Charlottesville, Virginia
- **Client:** FCCI Insurance Group, Sarasota, Florida
 - **Project:** Wind analysis for structure collapse at Riverside, Missouri

- **Project:** Weather analysis; and rainfall, temperature and winds for slip and fall accident at Michigan City, Indiana
- **Weather Impact Services**
 - **Client:** Oldcastle Materials Inc, Washington DC
 - **Project:** Developed and maintained national weather monitoring and analysis program for Oldcastle Materials, Inc, national highway construction division. Provided weekly precipitation analysis reports and data for over thirty construction sites throughout the United States. Provided weather analysis services for transportation construction from 2004 through 2008.
- **Marine Weather Impact Services**
 - **Client:** Private
 - **Project:** Weather forecasting services in support of environmental sensor buoy installation off of Block Island, Rhode Island USA. Project involved twice a day 48 hour forecasts, with 3 to 5 day outlook detailing wind, seas, and visibility at the operating site. Forecast provided weather impacts on transit, and onsite installation operations, including diving. Meteorological support was critical to determine 30 hour weather window to conduct safe and successful operations.
- **Climate Impact Services**
 - **Client:** Wood Mackenzie Research and Consulting
 - **Project:** Produced 151 year historical temperature analysis for Buenos Aires, Argentina in support of natural gas usage study
 - **Client:** J.M. Family Enterprises, Deerfield Beach, Florida
 - **Project:** Climate study of Mobile, Alabama, for personnel risk assessment
 - **Client:** Private
 - **Project:** Twenty-eight year historical wind analysis for Houston, Texas in support of pollution study.
 - **Client:** Sea Dream Yacht Club, Miami, Florida
 - **Project:** Detailed marine climate assessments of Caribbean, Eastern Coast of South America and French Polynesia for cruise ship operations.
- **Application Development**
 - **Client:** In house development for Red Sky
 - **Project:** Developed custom meteorological observation processing application, including data retrieval, weather element parsing and SQL database storage
 - **Project:** Developed custom site specific multi-station weather analysis application, including:
 - Observation site location based on site of interest and range criteria
 - Full weather element analysis; temperature, dew point, wind direction, wind speed, wind gusts, peak winds, precipitation, pressure, relative humidity, weather
 - **Project:** Developed vertical wind profile site-specific analysis application to determine most-probable wind at specific elevation or range of elevations.
 - **Project:** Developed custom JAVA application library of meteorological conversion and derivation formula.

Avineon, Inc – Defense Sector

GIS/Meteorology Project Manager, May 2008 – October 2010

- GIS and meteorology project manager and applications developer
 - Project Manager and lead meteorologist subject matter expert for web-base impact assessment portal development for U.S. Navy Fleet Numerical Weather Center, Monterey, CA
 - Application Development
 - Developed comprehensive database structure to support the retrieval, storage and processing of

- meteorological data in support of open GIS web-based visualization tools
- Developed impact assessment JAVA package for the analysis and web-based visualization of observation and forecast data for critical military operations
- Developed JAVA package for retrieval, processing, display and impact of National Weather Service weather alerts
- Developed open source GIS web-based applications for the dynamic visualization of critical meteorological information in both two and three-dimensional depictions
- Developed user GUI and data manipulation tool in ESRI ArcView for airfield terminal flight procedures

Embry-Riddle Aeronautical University, Norfolk, VA

Adjunct College Professor, 2002 – 2006

- Adjunct college professor teaching in the classroom and online. Subject areas include;
 - Meteorology
 - Physics
 - College mathematics, through introductory calculus.
- Responsible for all academic research in support of lesson development, class lecture preparation, lecture multimedia production, examination preparation, and grading of all student examinations and papers.
- Conducted academic advisement and counseling as required.

U.S. Naval Meteorology and Oceanography Center, Norfolk, VA

Senior Operational Military Meteorologist, 2000 – 2003

- As Senior Watch Officer was responsible for all facets of meteorological support, new product development and implementation, management of all watch personnel, personnel qualification program, and personnel training and education
- As maritime forecaster and ship router, produced accurate and critical medium to long-range weather and oceanographic forecasts and track guidance for units of the Atlantic Fleet.
- Expertly managed U.S. Navy Long-Range Forecasting Division/Energy Conservation Program. Program was directly responsible for over \$4 million in cost avoidance for Department of Navy U.S. shore establishment's fuel and utility budget fiscal year 2000 to fiscal year 2001.
- Highly automated long-range forecasting process through the development of unique visual basic, MATLAB procedures and computer codes.
- Developed and automated unique mathematical forecast verification program for long-range forecasts, providing valuable forecast guidance.

Royal Navy Commander in Chief Fleet Weather and Oceanographic Centre, London, UK

Senior Meteorology Forecaster, 1998 - 2000

- Expertly produced invaluable environmental forecasts, including aviation, marine, ground and oceanographic, for United Kingdom Ministry of Defense and Civilian Ministries for locations throughout the world
- Lead forecaster for several highly critical UK military operations, including Kosovo, Iraq and West Africa. Skillfully supported all phases of operations; including maritime, ground and aviation, with detailed weather and operational impact forecasts
- Developed all meteorological procedures for U.K. Ministry of Defense Cruise Missile Program. Highly commended for this effort by Commander In Chief Naval Forces Europe.
- Developed unique climate assessment and operational impact products for U.K. Ministry of Defense. Products proved highly useful in all phases of strategic mission planning.

U.S. Navy Meteorology and Oceanography Center, Guam, Marinas

Meteorologist, 1993 - 1995

- Tactical Meteorology Division supervisor. Coordinated and provided all tactical meteorological support for

U.S. Naval, U.S. Marine Corp and Joint operations in the Western Pacific, Philippine Sea, Indian Ocean, Arabian and Persian Gulf.

- Supervised and trained six forecasters producing weather forecasting and providing meteorological services to U.S. Navy, NOAA, U.S. Coast Guard and U.S. merchant vessels in the Western Pacific.
- As maritime forecaster and ship router, produced accurate and critical medium to long-range weather forecasts and track guidance for units of the Atlantic Fleet.

EDUCATION

M.S., Meteorology and Physical Oceanography

Institution: U.S. Naval Post Graduate School, Monterey CA, 1998

GPA: 3.83

Thesis: Response of the South China Sea to Forcing by Tropical Cyclone Ernie (1996). Utilized full physics Princeton Ocean Model (POM) to model the physical oceanographic affects; sea-surface deformation, surface currents, and subsurface vertical and horizontal water motions, of typhoon force winds on semi-enclosed ocean basin. To facilitate this study, developed custom temporally and spatially varying wind field model of Tropical Cyclone Ernie (1996) to provide forcing to the POM.

B.S., Applied Mathematics

Institution: University of Florida, Gainesville, FL, 1987

GPA: 3.46

Post Baccalaureate Education in Geographic Information Systems

Institution: Pennsylvania State University (2006)

Courses:

- The Nature of Geographic Information
- Problem Solving with GIS
- GIS Database Development
- GIS Programming and Customization

ESRI GIS Technical Courses

- Creating, Editing, and Managing Geodatabases for ArcGIS Desktop (for ArcGIS 9.0-9.1)
- Solving Disaster Management Problems Using ArcGIS 9
- Spatial Analysis of Geohazards Using ArcGIS 9
- Linear Referencing with ArcGIS Desktop

Project Management Courses

- Essentials of Project Management, Villanova University

On-the-Job and Informal Training

- Principles of IT Project Management
- Unified Software Development Process
- Capability Maturity Model Integration (CMMI)

PROFESSIONAL AFFILIATIONS

- Member of the American Meteorological Society
- Member of the National Weather Association
- Member Project Management Institute