

## **Appendix – B**

### **DMAC Personnel Resume (Lauren Showalter and Kyle Wilcox)**

#### **Lauren Showalter**

Project Manager

Axiom Data Science, LLC.

Phone: (251)-295-3590; Email: [lauren@axiomdatascience.com](mailto:lauren@axiomdatascience.com)

#### **Professional Qualifications**

Northern Kentucky University; Highland Heights, KY; Biology; B.S., 2005

University of Alabama; Tuscaloosa, AL; Marine Science; M.S., 2010

#### **Appointments**

2020 – Present            Project Manager, Axiom Data Science, Anchorage, AK

2016 – 2020   Program Officer, National Academies of Sciences, Engineering, and Medicine, Washington, DC

2012 – 2016   Program Manager, Texas A&M University-Corpus Christi, Corpus Christi, TX

2010 – 2012   Research Technician, Dauphin Island Sea Lab, Dauphin Island, AL

2006 – 2010   Teaching Assistant, University of Alabama, Tuscaloosa, AL & Dauphin Island, AL

#### **Relevant Publications**

Keating, Kathryn Sweet, Melissa Gloekler, Nancy Kinner, Sharon Mesick, Michale Peccini, Benjamin Shorr, Lauren Showalter, and Jessica Henke]. "Coordination of long-term data management in the Gulf of Mexico: Lessons learned and recommendations from two years of cross-agency collaboration". Shore and Beach, 2020. *In Review*.

#### **Synergistic Activities**

2020 – Present: Manage various projects for Axiom Data Science including the Southeast Coastal Ocean Observing Regional Association (SECOORA), Ørsted Wind Energy ECO-PAM, and Animal Telemetry Network Data Assembly Center (ATN-DAC).

2017 – Present: Core team/organizing member of the Deepwater Horizon Long Term Data Management working group. This effort was initiated to reviewing existing data management systems, discover opportunities to advance the integration of these systems, document the availability of data for restoration planning, project implementation, and restoration monitoring efforts, and providing a platform for increased communication among the various data Gulf of Mexico entities.

2016 – 2020: Manage data activities for the Gulf Research Program an independent, science-based program that funds studies, projects, and other activities in the areas of oil systems safety, environmental resources, and human health and well being.

2012 – 2016: Lead a team of researchers, data specialists and computer system developers in the development of a data management system to store scientific data generated by Gulf of Mexico Research Initiative (GOMRI) researchers. Accessible from: <https://data.gulfresearchinitiative.org/>

## Biographical Sketch — Kyle Wilcox

Kyle Wilcox will function as project lead (SECOORA Data Team Lead) and provide expertise on model ingest, assessment and registration of partner catalogs, automated metadata improvement and translation, and best practice documentation. Kyle Wilcox has over 8 years experience working in the ocean and environmental sciences, where he specializes in making environmental data easily discoverable through standardized web services such as CSW, SOS, and THREDDS. After earning a BS in Computer Science from the University of Rhode Island in 2006, he went to work for the NOAA Chesapeake Bay Office in Annapolis, MD, working on managing huge collections of modeled and observed data. He relocated back to his home state and started working for Applied Science Associates in 2009. While at ASA, Kyle led the software development team which was focused on the visualization, analysis and storage of large scale environment data. Kyle joined Axiom Data Science in November 2013. Throughout his career, Kyle has been involved in many IOOS related projects including the IOOS catalog (<http://catalog.ioos.us/>), the MARACOOS regional association (<http://maracoos.org/>), and the Coast & Ocean Modeling Testbed (<http://testbed.sura.org/>). Kyle is a member of the GeoPython organization (<https://github.com/geopython>) which authors Python software packages for serving, managing, and accessing environmental and geospatial data and the sci-wms organization (<https://github.com/sci-wms>) which contributes to and manages the releases of the sci-wms software package.

### Position and Address

Senior Software Engineer  
Axiom Data Science, Providence, RI

### Professional Preparation

University of Rhode Island, Computer Science, BS 2006

### Appointments

2013 – Present        Software Architect, Axiom Data Science, Providence, RI  
2009 – 2013        Software Engineer/Project Manager, Applied Science Associates (ASA), Providence RI  
2008 – 2009        Software Engineer, Public Display, Providence, RI  
2006 – 2008        IT Project Lead, Veridyne Inc., Annapolis MD

### Publications

**Wilcox, K.**, & Vance, T. (2015). Particle tracking in ocean and atmospheric studies. In L. Armstrong, K. Butler, J. Settelmaier, T. Vance, & O. Wilhelmi (Eds.), *Mapping and modeling weather and climate with GIS* (pp. 129-138). Redlands, CA: ESRI Press.

Vance, T., **Wilcox, K.**, Beegle-Krause, C.J., Schroeder, M. (2013, July). Modeling marine larval behavior using enhanced technologies. Paper presented at ESRI User Conference, San Diego, CA.

**Wilcox, K.**, Crosby, A. (2013, July). LarvaMap - A python powered larval transport modeling system. Paper presented at SciPy, Austin, TX. Available at <http://pyvideo.org/video/2074/larvamap-a-python-powered-larval-transport-mode-1>.

**Wilcox, K.**, Sontag, S. (2011, September). Bringing the oceans to life using OGC services and dynamic visualization. Paper presented at FOSS4G, Denver, CO.

Howlett, E., **Wilcox, K.**, Stuebe, D., Galvarino, C. (2010, June). Merging Web 2.0 Technologies with Cloud-Based Web Services to Address Ocean and Coastal Geospatial Applications. Paper presented at Com.Geo, Washington, DC.

### Synergistic Activities

2009 – 2013        Worked for the IOOS national office and two regional offices to catalog solutions for data streams and feeds, performing systems integration and support, and developing and supporting various Python libraries and tools for data access, manipulation, and visualization.

2010 – 2012        Managed logistics and requirements for the Dubai Coastal Ocean Observing System,

including development of applications for integrating data from real-time meteorology and oceanography stations, HF radar, and video cameras.

2009 – 2012 Planner, system architect, and developer for NOAA's Coastal Ocean Modeling Testbed.

2008 – 2009 Optimized cloud architecture for scalability and cost efficiency for a small start up and their clients.

2007 – 2008 Project assessment, planning, design, development, and deployment of the cyberinfrastructure currently in use by the Chesapeake Bay Observing System (CBOS) to obtain, analyze, and share observational and modeled data with the public