# Christopher K. Allen, M.Sc.

## *Education*

Ithaca College, B.A. in Architectural History, 2009

University of Maine, M.Sc. in Civil Engineering, 2013

## *Professional Experience*

8/13 – present: Research Engineer, University of Maine, Advanced Structures and Composites Center, Orono, Maine

5/11 – 8/13: Graduate Research Assistant, University of Maine, Advanced Structures and Composites Center, Orono, Maine

## *Relevant Publications*

1. A.M. Viselli, H.J. Dagher and A.J. Goupee, C.K. Allen, Design and Model Confirmation of the Intermediate Scale VolturnUS Floating Wind Turbine Subjected to its Extreme Design Conditions Offshore Maine, *AWEA Windpower 2014* and *Wiley Wind Energy Journal* , currently in review
2. C.K. Allen, The Implementation of Morison’s Equation in the Dynamic Modeling and Structural Analysis of a Floating Offshore Wind Turbine, M.Sc., *University of Maine*, Orono, Maine

## *Synergistic Activities*

1. Graduate work focused on research and design of offshore floating wind turbines. Completed structural and hydrodynamic design and analysis for the currently-deployed 1/8th-scale VolturnUS floating wind turbine located in Castine, Maine.
2. Currently engaged in verification of numerical tools utilized in the desigbn of offshore wind turbines. Specifically, verification of non-linear mooring models through the use of test data generated by heavily instrumented1/8th-scale VolturnUS floating wind turbine.
3. Design team member of the Aqua Ventus I floating wind turbine demonstration project to be deployed in 2017 off Monhegan, Maine. Responsibilities and contributions to the system’s design included;
   1. Structural analysis of the prestressed-concrete hull
   2. System stability analysis
   3. Tow-out analysis, planning and tank tests
   4. Station keeping system design and analysis
   5. Conceptual development of hull design