

# Margaret Avenir

## Contact Information

4746 18th Ave NE  
Seattle, WA 98105  
(207) 766-6324  
avenerm@u.washington.edu

## Education

- 2007-present *University of Washington, Seattle, WA*  
M.S. candidate in Civil and Environmental Engineering
- 2003-2007 *Massachusetts Institute of Technology, Cambridge, MA*  
B.S. in Environmental Engineering Science

## Employment History

- 2007-present *Environmental Fluid Mechanics Group, UW*  
Research assistant. Assisted with field research on the Merrimack River plume. Designed and carried out laboratory experiments simulating the effects of variable discharge on buoyant coastal plumes.
- 2007-2008 *Department of Civil and Environmental Engineering, UW*  
Teaching assistant for *CEE 342: Fluid Mechanics*. Developed labs, led lab sections and problem-solving workshops for undergraduate students.
- 2007 *Department of Electrical Engineering and Computer Science, MIT*  
Laboratory assistant for *Introduction to EECS I*. Supervised small groups of undergraduates in software and hardware robotics labs.
- 2007 *Department of Electrical Engineering and Computer Science, MIT*  
Teaching assistant for *Mobile Autonomous Systems Laboratory*. Worked with undergraduate students to debug autonomous robots in a laboratory setting.
- 2006 *Prometheus Radio Project, Philadelphia, PA*  
Intern focusing on technical work. Designed, debugged, and documented equipment for low power radio stations.
- 2006 *Nepf Lab, MIT*  
Undergraduate researcher in fluid mechanics. Modeled flow in constructed wetlands through tracer experiments in a model basin. Performed field experiments with tracers in a constructed wetland.

- 2005            *Stocker Lab, MIT*  
Undergraduate researcher in fluid mechanics. Developed laboratory experiments to examine spontaneous oscillations of a sessile lens.
- 2004            *Center for Reflective Community Practice, MIT*  
Undergraduate researcher in community organizing and radio technology. Worked with Boston's *Asian Community Development Corporation* to design and build a community radio station.

## **Publications**

Lightbody, A. F., M. E. Avener, and H. M. Nepf. 2008. Observations of short-circuiting flow paths within a free-surface wetland in Augusta, Georgia, U.S.A. *Limnology and Oceanography* 53: 1040-1053.

## **Conference Presentations**

Avener, M.E., A.R. Horner-Devine, and P. B. Rhines. 2008. Laboratory Experiments Simulating the Effects of Variable Discharge on Buoyant Coastal Plumes. *American Geophysical Union, Fall Meeting*, San Francisco, CA.