## Laurel Henderson Heat, Light, and Sound Research 1130 Wall Street #518 La Jolla, CA 92037 (858) 652-2242 laurel(AT)hlsresearch.com

Citizenship: U.S. Security Clearance: Secret

## **INTERESTS**:

Scientific programming with applications in seafloor geology, underwater acoustics, marine mammal acoustics, and oceanography.

## **EDUCATION:**

Ph.D., Geological Sciences, Northwestern University, 1985 M.S., Geological Sciences, Northwestern University, 1982 B.S., Geochemistry, California Institute of Technology, 1980

## RECENT EMPLOYMENT:

Senior Scientist HLS Research 2009 – Present

- Acoustic Modeling for NOAA Underwater Sound-Field Mapping Working Group.
- Scientific Programming for Marine-Mammal acoustic modeling tool ("Simple Tool").
- System Administrator for Heat, Light, and Sound's servers and PC's (Windows, Linux, and Mac OS X).

Scientist

Space and Naval Warfare Systems Center Pacific 1999 – 2009

- Acoustic modeling for glider experiments, tests of unmanned bi-static/active systems, and numerous other sonar systems and hydrophone arrays including ADS and SURTASS.
- Technical liaison with Integrated Logistics Support for unmanned bi-static ASW systems.
- Studies of wide-area clearance scenarios involving active sensors.
- Array-element localization studies for numerous arrays.
- Survey Planning Working Group Lead for FDSC, which included planning, coordinating, and participating in bathymetric and side-scan surveys prior to deployment of bottom arrays.
- System Administration for UNIX, Linux, and Microsoft systems.

Programmer Analyst Scripps Institute of Oceanography 1997 – 1998

• Software development for analysis and display of global climate predictions and seismological data.

Scientific Programmer

Institute of Marine and Coastal Sciences, Rutgers University, NJ 1992 – 1997

- Software and webpage development for
  - Analysis and display of data from oceanographic and meteorological sensors, including CTD's, and ADCP, BASS and S4 current meters.
  - Development of diagnostic tools for oceanographic models including 2D and 3D animated displays.