

Seeking new opportunities that utilizing my programming and data analysis skills to address practical environmental problems. Open to working in any part of the Americas. Academic *Vitae* available upon request.



## Education:

**Syracuse University, Ph.D. in Earth Sciences** Syracuse, NY (Aug. 1996)

Wetland groundwater hydrology & geochemistry investigated to evaluate importance of a peat basin in global carbon cycling.

**Northern Illinois University, M.S. in Geology** DeKalb, IL (Dec. 1990)

Assessed water chemistry and hydrogeology along coast of Yucatan (Mexico).

**University of Illinois, B.S. in Geology** Champaign, IL (May 1986)



## Experience:

**Professor, University of Maine** Sept. 1996 to Present (Assistant to Full Professor)

Teach classes and conducting research on various hydrology (flow and chemistry) problems using field methods and computer tools.

**Hydrogeologist, Argonne National Laboratory** Sept. 1990 to Aug. 1991

Prepared work plans for hydrogeologic assessments. Performed statistical analysis evaluating sampling methodology. Assisted with groundwater sampling program.

**Hydrogeologist, ATEC Associates, Inc.** Sept. 1988 to Aug. 1990

Responsible for groundwater monitoring programs at RCRA facilities. Collected and interpreted groundwater flow and chemistry data.

**Technician, Illinois State Geologic Survey** Sept. 1985 to Aug. 1986

Prepared coal samples for analysis and assisted with flotation and shake-table tests.



## Skills:

Routinely manipulate data sets with **Python** programming language and associated scientific software (Numpy, Scipy, H5py, Pandas, Matplotlib, Cython, Ipython, etc.) in linux computing environment.

Excellent knowledge of groundwater and surface-water **hydrology** and aquatic chemistry.

Work with a range of **computer modeling software** packages used by federal agencies (Modflow, Phreeqc, etc.), use personally prepared simple hydrologic models (TR55, GR4J) for classroom and research activities.

Knowledgeable about **basic numerical methods** for solving ordinary and partial differential equations (finite difference, finite volume, Runge Kutta, Adam's methods).

Basic knowledge of statistics (PCA, Cluster Analysis) and excellent ability to prepare **graphics for displaying data**.

Strong written and oral **communications skills**, comfortable speaking to large groups.

Intermediate knowledge of Spanish.