

Matthew T. Perry

Software Developer and GIS Analyst

I build software solutions for data-driven decision making. Since 2002, I have focused on spatial data analysis workflows, full-stack scientific software development, interactive data visualizations, and web mapping applications for natural resource management.

Experience

- 2015 - **Independent Consultant** perrygeo.com
Geospatial data science and full-stack software consulting
- 2011-2015 **Senior Software Developer** [Ecotrust](http://ecotrust.org)
Lead developer of software, web applications and data analysis workflows to support environmental and economic decision making.
- 2009-2011 **Geospatial Web Application Developer** [MarineMap Consortium](http://marinemap.org)
Lead back-end developer for MarineMap, an online tool for collaborative marine spatial planning.
- 2007-2009 **GIS Analyst** [Geosyntec Consultants](http://geosyntec.com)
Database management, visualization and analysis for environmental remediation and hydrology.
- 2005-2007 **Analyst/Software Engineer** [NCEAS](http://nceas.org)
Data analysis for research project to quantify threats to the global marine ecosystem. Lead developer of metadata management software.
- 2002-2005 **Graduate Research Assistant** [Humboldt State University](http://humboldt.edu)
GIS lab instruction, lectures, software development for research projects.

Education

- 2002-2005 **M.S. Natural Resource Planning and Interpretation** [Humboldt State University](http://humboldt.edu)
Design and Evaluation of a Web Mapping Service for the Klamath River Basin.
- 2001 **Certificate Geographic Information Systems** [Humboldt State University](http://humboldt.edu)
Focus on interactive web mapping and open source GIS.
- 1996-2000 **B.S. Psychology** [Virginia Tech](http://virginia.edu)
Minor: Statistics, Focus on social science research design.

Projects

- 2014 **Forest Planner** forestplanner.ecotrust.org
Forest management scenario planning app, winner of the 2014 Open Planning Tools Group "Innovative Tool Award".
- 2012 **Regional Aquatic Priorities** aquatic-priorities.apps.ecotrust.org
Application for prioritizing watershed conservation efforts and optimization for multi-objective planning in the Pacific Northwest
- 2010 **MarineMap** marinemap.org
Collaborative marine spatial planning tool. Winner, 2010 U.S. Institute for Environmental Conflict Resolution "Innovation in Technology Award".
- since 2002 **Other Applications, Publications, Presentations, etc.** blog.perrygeo.net
For a complete list of past works, please see my online CV.

Skills

GIS

ArcMap, ArcPy, PostGIS, GDAL, QGIS, GRASS, Mapnik, GeoPandas

Data Science

Postgresql, Redis, Scikit-learn, SciPy, R, Numpy, Pandas

Front-end

JavaScript, D3, AngularJS, Leaflet, OpenLayers

Back-end

Python, Django, Mapserver

IT/Devops

Vagrant, Docker, Amazon AWS, Ansible, Linux

Environmental

Forestry, Ecology, Geomorphometry, Climate, Hydrology

Statistics

Bayesian Networks, Discrete Optimization, Machine Learning, Sensitivity Analysis

Contact

Ocean Breeze Drive
Lance Aux Epines, St.
Georges, Grenada
(473) 459-2341
perrygeo@gmail.com
<http://github.com/perrygeo>