Colin J. Stief

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cs-works.herokuapp.com   San Francisco, California

Professional Experience

Project Manager and Data Analyst   September 2018 - Present
Water Systems Optimization, San Francisco, CA

- Consult water utilities in assessing, tracking, and reducing water losses
- Produce technical reports describing patterns, trends, and anomalies in datasets related to water supply and consumption
- Extract, transform, and analyze data from various sources such as enterprise databases, mobile data collection systems, and paper records
- Leverage modern scripting languages such as R, JavaScript, and Python

Senior Applications Designer   August 2014 - September 2018
Chesapeake Conservancy, Annapolis, MD

- Conducted geospatial analysis related to natural resources conservation, watershed management, species biodiversity and habitat restoration
- Designed and developed web mapping applications for visualization, asset management, and reporting purposes (typically via cloud environment)
- Trained government, NGOs, and academia on geospatial technology, mobile data collection, database design, and scientific decision support tools

English Language Teacher   April 2012 - March 2013
CEC Language School, Thailand

GIS Watershed Research Intern   January - November 2011
New York City Department of Environmental Protection, USA

Trail Worker   September 2009 - September 2010
Olympic National Park, USA

Education

Duke University, *Durham, North Carolina*   August 2013 - May 2015

- Master of Environmental Management (MEM)
- Coastal Studies concentration with coursework in: Biological Oceanography; Marine Invertebrate Zoology; Conservation Biology; Ecological Statistics with R; Community Env. Management; Shoreline Processes; Climate Adaptation

Miami University, *Oxford, Ohio*   August 2005 - May 2009

- Bachelor of Arts (BA), Geography
- GIScience concentration with coursework in: Map Interpretation; Techniques in Remote Sensing; GIS for Landscape Ecology; Database Management; Statistics

Technical Skills

Geospatial software

- ESRI 9.x and 10.x products: ArcGIS for Desktop, Server, Online, Pro
- Open source: QGIS, Whitebox GAT, SAGA
- Web mapping: ArcGIS JavaScript API, Mapbox, Carto, GeoServer

Programming languages

- General purpose: Python (especially for geospatial processing), Bash scripting
- Web development: HTML/CSS/JavaScript, React, Redux, WordPress
- Statistical packages: R, Pandas

Other

- Databases: PostgreSQL/PostGIS, MySQL, SQL, MongoDB
- Design: Adobe Photoshop, InDesign, XD, Tableau, iorad, Loom
- Management and Processing: GitHub, Microsoft Office, Notion, Asana, Slack

Awards and Recognition

Innovative Product of the Year, "Restoration Reports" (Nominated)   2018
Public Lands Alliance Partnership Awards

See, Find, and Share Award (as part of Conservation Innovation Center)   2016
ESRI International User Conference

Special Achievement in GIS (as part of Conservation Innovation Center)   2015
ESRI International User Conference

Henry H. Kendall Memorial Scholarship   2008
Miami University

Selected Speaking Engagements

National Conference on Ecosystem Restoration   2018
"Collaborative Planning for Apalachicola Restoration in High Resolution"

Society of Conservation GIS Annual Conference   2017
"Innovative Data and Tools for Chesapeake Bay Restoration"

Chesapeake Bay Program Local Government Advisory Committee   2017
"Data, Maps, and Tools for Planning"

Large Landscape Conservation Breakfast (Land Trust Rally)   2016
"Web-based Mapping Tools for Large Landscape Conservation"

Maryland Municipal League Summer Conference   2015
"Planning Tools for Environmentally Aware Municipalities"

Work Samples

Nature's Network Prioritization Tool - (https://tinyurl.com/yahsjqza)

Decision support tool used to create prioritization maps for endangered species in the northeast United States. Powered by statistical model written in the Pandas library.

Restoration Reports - (https://restorationreports.com)

Outreach tool that produces PDF reports for assessing restoration and rehabilitation opportunities related to agriculture, ecosystem services, and species habitat

South River Data Viewer - (https://southriverdata.net)

Interactive web-mapping application for visualizing water quality parameters of a local watershed monitoring group.