Stace D. Maples

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Location-Based Technologies Expert, Spatial Data Science Educator & Evangelist, Geospatial Swiss Army Knife, Habitual Tinkerer, Problem-solver & Lifetime Learner

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References

On Request

Professional Objective

 To allow researchers to do more meaningful work by helping them investigate, quantify and solve spatial problems.

Expertise

- 20+ years of experience building and supporting geospatial data and technology services & solutions for research and teaching in R1 universities
- Geospatial Data Science and Remote Sensing for Public Health and Environmental applications
- Curation, licensing, acquisition and distribution of geospatial data and software services for research and teaching
- · Creation, management and administration of spatial data support programs
- Discovery & access for data collections
- Planning, implementation and management of long-term GIS projects
- Design and implementation of integrated, multi-user geospatial field data collection systems
- · Digitization of cartographic materials for access and digital applications
- Event planning and coordination
- Agile Development practices

Professional Experience

Assistant Director of Geospatial Collections & Services, Stanford University Libraries

March 2021-present

- Develop, curate, acquire & manage modern maps & geospatial data operations, collections, services and support. Significant acquisitions & assets managed include:
 - Esri Higher Eduction Site License
 - ArcGIS Online sub-org with ~3000 users
 - ArcGIS Server-based global geocoding and routing services for research
 - · Here Inc. global geocoding & routing database
 - Planet.com Enterprise Education & Research Subscription
 - Google Earth Engine Enterprise Access
 - CARTO.com Enterprise
 - CoreLogic Real Estate Database
 - SimplyAnalytics.com
- Development, implementation & maintenance of internal spatial data infrastructure & services, including:
 - o earthworks.stanford.edu Product Owner. Stanford's spatial data discovery and access platform
 - locator.stanford.edu (Stanford IP, only) Esri ArcGIS Server-based global geocoding and routing services for research and teaching
 - Stanford Spatial Data Infrastructure (SSDI) PostgreSQL/PostGIS/GeoServer stack supporting spatial data services for Earthworks and Stanford research data
- Head of the Stanford Geospatial Center (SGC), supporting 1,000+ students and faculty with over 100
 workshops, class lectures, and presentations per year and nearly 6,000 one-on-one reference
 consultations
- Direct supervision and management of SGC staff, including:
 - Geospatial Reference and Instruction Specialist
 - Library Specialist 2
 - GIS Assistant
 - Student Staff
- · Design and delivery of instruction to geospatial data users
- Cultivate vendor relationships that enrich access to cutting edge technology for researchers at Stanford University
- Design & Administration of the Stanford Geospatial Center SkySat Archive & Tasking Granting Program for Stanford Student Researchers

Interim Curator & Head, David Rumsey Map Center at Stanford Libraries

January 2023 - November 2023

- Curate, acquire and manage the historical & antiquarian cartographic special collections of Stanford University
- Direct operations & programming for The David Rumsey Map Center at Stanford's Green Library
- Direct supervision and management of DRMC staff, including:
 - Rare Maps Librarian
 - Cartographic Metadata Librarian
 - Operations Manager
 - Library Specialist 2
 - Student Staff
- Management and oversight of ongoing transfer of Rumsey Collection materials from D. Rumsey's personal studio, to the David Rumsey Map Center.
- · Management and oversight of the Stanford Map Collection Digital Philanthropy Program
- Event & Exhibit planning and coordination, including:
 - Machines Reading Maps Summit 2023
 - The California Map Society Annual Meeting & Conference
 - The Barry Lawrence Ruderman Conference on Cartography 2023
- Administration & Judging of the California Map Society Student Exhibit Curation Contest

Lecturer, Stanford Doerr School of Sustainability, Stanford University

<u>EARTHSYS 144: Fundamentals of Geographic Information Science (GIS) (ESS 164)</u>, Autumn Quarter 2020-present

CEE 165H: Big Earth Hackathon Wildland Fire Challenge, Spring Quarter 2018-present

Geospatial Manager

Stanford Geospatial Center, Branner Earth Sciences Library, Stanford University

Jan 2015-March 2021

DJ/Radio Personality

KZSU 90.1 FM, Stanford

Jan 2016 - Present

https://zookeeper.stanford.edu/?action=viewDJ&seg=selUser&viewuser=1428

Geographic Information Systems Specialist & Instruction Coordinator, Yale University Library, Map Collection

Sept 2010 - Jan 2015

Geographic Information Systems Assistant & Instruction Specialist, Yale University Library Map Collection

Aug 2005 - Sept 2010

Research / Teaching Assistant, University of Texas at Dallas

Aug 2003 to Aug 2005

Owner/Manager, Skin&Bones

June 1989 - Sept 2004

Additional Teaching

- SMU Summer Geospatial Bootcamp: 2015 2020
- GeoTech, Bishop Dunne High School, Dallas, TX: 2010-2020
- EARTH 1B: Know Your Planet: Big Earth, Stanford University Winter Quarter 2018 present
- Wrigley Field Program in Hawaii, Stanford School of Earth, Energy & Environmental Sciences, 2016 present
- Stanford Summer Research College (SRC), 2015-present

- The Stanford Geospatial Center GIS Workshop Series, 2015-present
- MODS Summer Graduate Student Orientation Program, Yale School of Forestry & Environmental Studies, 2006-2014
- Geospatial Law & Policy, Yale Law School, 2010. Co-taught with Dr. Richard Brooks. Seminar exploring
 the intersection of geospatial and location-based technologies, and the legal system. Guest lectures
 included: Pete Schreiber, Esri General Counsel; Mikel Maron, mapgive.state.gov and OSM Foundation;
 Dr. Scott Edwards, Project Manager, Science for Human Rights, Amnesty International.
- GIS for Archaeology, Yale University. Co-taught with Dr. William Honeychurch
- Geophysical Prospecting Methods for Archaeology, Yale University. Co-taught with William Honeychurch.

• The Yale Map Department GIS Workshop Series, 2005-2014.

Selected Projects

Making Pastoralists Count

Funding: Bill & Melinda Gates Foundation

StoryMap (beta): https://arcg.is/0XGrDO

In one of its first grants, DGF released imagery to Stanford for analysis of health in nomadic pastoral populations in Ethiopia. Hannah Wild & SGC Team used the data to locate mobile settlements quickly enough to develop and deliver hundreds of surveys to people living in the remote region of Ethiopia's Lower Omo Valley. Gates funding has expanded the project to include ML-based rapid settlement detection, using Planet.com daily imagery.

MotoMeds

Improving Nighttime Access to Care and Treatment (Part 2) (INACT2)

Consulting spatial data scientist and field data specialist. Designed and implemented survey frameworks for highly-dispersed, unaddressed households in Les Cayes, Leogane and Gressier communes, Haiti.

Outbreak Responder

<u>Evaluation of a Smartphone Decision-Support Tool for Diarrheal Disease Management in a Resource-Limited</u>
<u>Setting</u>

The Outbreak Responder is a decision-support and epidemiology platform for use during diarrheal disease outbreaks. The first component is a rehydration calculator that automates World Health Organization guidelines

for how to assess and rehydrate a patient with diarrheal disease. The second component is intended for the Outbreak Response Team that may include epidemiologists, public health administrators, and clinicians. The design leverages geospatial mapping to identify critical actionable data.

Geo4LibCamp

Role: Co-founder/Host

Geo4LibCamp is an annual unconference hosted at Stanford University. A three day unconference, followed by two working days to collaborate, learn, and make progress on spatial data services and support in libraries.

iiif + Maps Community

Role: Co-founder/Co-Chair

This group works on developing extensions that enable, and defining best practice in, associating geographical information with <u>iiif image materials</u>. This includes iiif recipes but also more in depth work to align efforts to link iiif maps to geospatial systems. The group has produced two extension to the iiif imagery framework: <u>the navPlace extension</u>, which allows geographic data associated with digital objects and collections to be provided in a structured manner; and <u>the geoRef Extension</u>, which allows digitized cartographic collections to be <u>placed in their geographic context</u>.

Photogrammar

photogrammar.yale.edu

Yale University's first NEH Digital Humanities Start-Up Grant [HD-51421-11]

"The Photogrammar Project is a Yale University Public Humanities Project designed to offer an interactive web-based open source visualization platform for the one-hundred and sixty-thousand photographs created by the federal government from 1935 to 1943 under the Farm Securities Administration and Office of War Information (FSA-OWI)."

Education

University of Texas at Dallas - 2005

M.Sc. in Geographic Information Sciences & Remote Sensing

Southern Methodist University -1997

- B.Sc. in Anthropology/Archaeology, Minor in Latin American Studies.
- · Graduated with Honors
- Departmental Distinction Award
- Clements Award for Southwestern Studies
- Edward I. and Peggy C. Fry Award for Academic Excellence in Undergraduate Anthropology

Ft. Burgwin Archaeological Field School - 1996

Additional Education:

- FAA Part 107 License Preparation, Pilot Institute, 2020
- Carpentries Trainer Certification, 2018
- SCRUM Product Owner Certification, Stanford University, 2016
- Intro to SCRUM, Stanford University, 2016
- QGIS Academy, DelMar College, 2015
- Esri T3G (Teachers Teaching Teachers GIS) Institute, June 13-18th 2010
- ESRI Data Management in the Multiuser Geodatabase / ArcGIS Server Enterprise Configuration and Tuning for SQL Server, July 2009
- Certification Geophysical Survey & Prospection for Cultural Resource Management, National Park Service / Dept. of the Interior, 2004

Technical Skills

- GIS & Spatial: Esri, R, QGIS, OSGEO, FOSS4G, Google Earth Engine, Google Cloud Platform, Mapbox APIs, CARTO, SQL, PostGIS
- · Programming & Development languages: Python, JavaScript, HTML, markdown, PHP, XML & Unix Shell
- · Agile/SCRUM development practices
- Consumer & survey-grade mapping equipment: GNSS/GPS systems, RTK and total station survey equipment
- Sub-Surface remote sensing: Ground Penetrating Radar, Magnetometry & Electric Resistivity
- · Multimedia editing and production
- Archaeological excavation and survey data collection methods
- Kite, Balloon & UAV-based Aerial Survey techniques