

STEPHANIE SAEPHAN

Geospatial
Consultant

Certified GISP with 20 years of experience in the fields of urban and environmental geography, Architecture, Engineering, and Construction (AEC), natural resource management, renewable energy/sustainability, and housing demographics. Open to work opportunities on a part-time, full-time, or consulting/contractor basis



CONTACT

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- [See sample work portfolio](#)
- [Learn more about me](#)
- Portland, OR (USA)

EDUCATION & CERTIFICATION

Master of Science | Botany
University of Hawaii Manoa | May 2006
Honolulu, HI

Bachelor of Arts | Geography
Clark University | May 1997
Worcester, MA

GISP Certification (#91282)
Valid to June 2026

SKILLS

ESRI Software:

ArcGIS Pro, ArcGIS Online, ArcGIS Earth, ArcGIS Desktop, 3D Analyst, Spatial Analyst, Urban, CityEngine, Image Analyst, Web AppBuilder, Experience Builder, Web Mapping, StoryMap, Hub, Dashboard, ModelBuilder

Data collection:

Trimble and Garmin GPS, Collector, Survey123, Field Maps

WORK EXPERIENCE

INDEPENDENT GEOSPATIAL CONSULTANT / April 2022 – Current

I provide services in customized trainings, technical writing, cartography (2D & 3D data visualization), geospatial database development, workflow process development, web mapping applications, spatial analyses, and needs-assessment

GIS MANAGER G70 / April 2012 – April 2022

- Lead in creating, improving, scoping, and developing GIS project plans, proposals, strategies, and services for clients in the AEC industry
- Co-Led in internal GeoBIM data visualization group in developing data interoperability workflow processes for CAD/BIM/GIS and coordinating cross functional collaboration between disciplines
- Implemented and managed a robust hybrid (ESRI & opensource) GIS platform for sharing resources across departments and with clients
- Provided technical support, GIS training and on-boarding for Environmental Planners, Civil Engineers, & Architects
- Developed and updated company GIS manual, cartographic design, and production standards
- On-site GIS support for Hawaii Dept. of Transportation Airports Division, Drafting Unit (1-2 days/week pre-pandemic)

VARIOUS GIS POSITIONS University of Hawaii Manoa / Aug. 2002 — April 2012

Worked in various GIS positions throughout the University system, either concurrently at 0.50% FTE or on consulting basis.

GIS Lab Manager/Junior Researcher, Department of Botany

- Provided GIS services, needs-assessment, trainings, and workshops for students, faculty, and affiliates
- Conducted GIS-based ecological research on avian diseases, invasive species spread, and seabird foraging in the Hawaiian-Pacific islands
- Managed the day-to-day operations of the joint, Pacific Cooperative Studies Unit/Botany Department's GIS research lab

GIS Coordinator/Data Manager, MAGIS Geospatial Center Hamilton Library

- Acted as the University-wide, point-person for GIS help and services to students, faculty, and general library users
- Implemented a Hawaii/Pacific Rim-centric geoportal that searched and harvested all GIS data and maps available in-house and from external cooperating partners
- Managed, inventoried, and prepared all in-house digital map collection for web deployment on the center's website

Imagery Analysis:

IDRISI, ENVI, ERDAS, GEE (beginner level)

Opensource GIS:

QGIS, GRASS, LizMap Web Mapping Client Application

Database/Coding: (Intermediate level)

Leaflet, GeoServer, PostgreSQL/PostGIS, GDAL/OGR, Arcade, ArcPy/Python

Other Skills:

- Technical Training and Writing
- Remote sensing and image analyses
- Geodatabase design and development
- Cross-platform workflow process development (CAD/BIM/GIS)
- Cartography, Data Visualization (2D, 3D)

GIS COMMUNITY INVOLVEMENT

Hawaii Opensource GIS User Group

Founded Hawaii-based opensource GIS user group in 2016 to share interests and knowledge with the GIS community at large.

Hawaii Geographic Information Coordinating Council

Elected Board Member and Secretary from 2016-2019. Co-chaired committee that developed and implemented a Corporate Sponsorship program which significantly increased the organization's fundraising capacity and operating funds.

Women+ in Geospatial Network – member since 2018

Oregon & Southwest Chapter of URISA (ORURISA) – member since 2021

North American Cartographic Information Society (NACIS) – member since 2022

GIS Consultant, School of Architecture Environmental Systems Lab

- Developed GIS-based web mapping application for a campus-wide Building Information Modeling and campus planning projects
- Conducted spatial analyses of residential energy consumption and efficiency for the Forest City military housing complex on Oahu

GIS Consultant, School of Ocean and Earth Science and Technology

- Developed a private, GIS-based web mapping application for the State of Hawaii's renewable energy project to route an underwater, inter-island transmission cable to distribute wind generated energy from Lanai and Molokai to Oahu. Purpose of web application was for viewing and querying information on underwater survey transects
- Taught hands-on GIS training to faculty, staff, and students on how to apply GIS to oceanographic research

GIS CONSULTANT

Massachusetts Water Resources Authority / Sept. 1999 – July 2002

Provided GIS support for the Planning Department of the Operations Division:

- Applied GIS to studies of water quality and reservoir risk assessments and mapping and analyses of facilities distribution system
- Redesigned, cleaned, coded, and mapped legacy spatial and non-spatial databases
- Trained interns and staff members in the use of customized GIS applications
- Performed QA/QC on legacy scripts and resolved problems related with ArcGIS system upgrade and ArcSDE migration

GIS ANALYST

Ocean Spray Cranberries, Inc. / May 1997 – April 1999

Provided GIS/cartographic services to cranberry grower-owners and agricultural research department:

- Researched and applied GIS to precision agricultural as it relates to cranberry production
- Analyzed aerial infrared imagery to assess cranberry bog health and production acreage
- Self-taught Arc Macro Language (AML) coding in ArcInfo to perform geoprocessing functions
- Developed in-house Cranberry Atlas providing maps and information on thousands of Ocean Spray's grower-owner bog properties and production information

HOUSING DEMOGRAPHICS CONSULTING

NEIGHBORHOOD HOUSING SERVICES OF CHICAGO (5/2005 - 9/2005)

Consultant for project examining if subprime mortgage loans with escrow provisions perform better than those without escrow. Involvement included: cleaning, preparing, and standardizing data from mortgage loan originators and servicers; run competing hazard models (failure versus prepay) of loan performance for six vintages of subprime loans.

U.S. DEPT. OF HOUSING AND URBAN DEVELOPMENT (8/2004 - 8/2005)

Consultant on project examining if increasing rates of homeownership among minorities are leading to lower levels of residential segregation in U.S. metropolitan areas using Census and Home Mortgage Disclosure Act loan data. Involvement included: assembling and cleaning geographic boundary files and performing segregation analysis on population and mortgage lending data for 50 large U.S. metropolitan areas.

NEIGHBORHOOD REINVESTMENT CORPORATION (5/2002 - 7/2002)

Worked on the Campaign for Home Ownership 2002 project. Performed location analysis used for strategic planning and implementation of NRC service delivery and expansion. Consulted on project research design and helped reorganize client database. Cleaned and prepared data for use in presentations.

JOINT CENTER FOR HOUSING STUDIES, HARVARD UNIVERSITY (7/2000 - 3/2002)

Consultant for various GIS-based projects for the Joint Center for Housing Studies at Harvard University. Some selected projects:

- Evaluating Multi-ethnic Segregation Patterns: Implemented spatial segregation measures for project and evaluating multi-ethnic segregation using 1990 and 2000 census, and Home Mortgage Disclosure Act loan data.
- Impact of the Community Reinvestment Act: Used census and mortgage lending data for spatial analysis of case study data for Ford Foundation-funded comprehensive evaluation of federal anti-redlining legislation.
- Low-Income Homeownership Symposium: Provided GIS research support for the Center's Low-Income Homeownership Symposium including spatial analysis of economic and demographic variability in home-buying at the census tract level in ten metropolitan areas.