



## Job Posting | **Remote Sensing Scientist**

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Land IQ, LLC is seeking a Remote Sensing Scientist in its Sacramento, California office with a specialization in data driven analytics and algorithm development with digital images for agricultural and other land use applications (crop classification, yield modeling, land use impacts, land use change, etc.).

The successful Remote Sensing Scientist candidate will be responsible for working with our growing geospatial team comprised of remote sensing/GIS experts and a range of agronomic, environmental, and other land-based science disciplines. Applicants must have strong analytical, remote sensing and GIS skills and an exceptionally strong understanding of machine learning algorithms. This is an environmental consulting position requiring ability to develop analysis approaches/methodology and work within a team to optimize methods. The applicant must have good communication skills, readily work in a team environment, demonstrate ability to manage multiple tasks and perform work on time and within budget resources.

Land IQ specializes in providing solutions to challenging agricultural and environmental problems throughout the western United States. Our areas of expertise include remote sensing, geospatial analysis, GIS, soil science, water quality and demand evaluation, agricultural systems, salinity and nutrient management, ecosystem restoration, statistics, and regulatory policy.

**Office Locations:** Sacramento, CA  
**Hiring Timeframe:** Immediate  
**Employment Type:** Full time, including benefits

### **Primary Responsibilities:**

- Work in a team environment on a wide range of projects, supporting our team of scientists, remote sensing analysts, and GIS analysts
- Organized and methodical with communications and work documentation
- Understand geospatial challenges and conceptualize and articulate analysis approach ideas within a multi-disciplinary team
- Develop and perform raster-based imagery analysis procedures, spatial and statistical modeling applications
- Perform and develop advanced object-based image analysis procedures and methodologies for earth science applications
- Develop and implement remote sensing and statistical methodologies to perform land use and land cover classification (crop classification)
- Develop innovative image analysis solutions using a wide array of data sources
- Resourceful in seeking, preparing, and/or creating raster & vector data
- Leverage a strong understanding of multispectral imagery characteristics to solve complex agricultural and environmental land-based problems

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## Required Qualifications:

- **Education:** BS/MS Remote Sensing/Geography/Data Sciences field (advanced degree preferred), Research Experience Preferred.
- **Experience:** 0-5 years of experience in at least one of the following areas:
  - Remote sensing-based land cover mapping over agricultural areas and crop classification;
  - Image based time series analysis and crop phenology modeling;
  - Remote sensing of crop evapotranspiration; and/or
  - Image based crop yield modeling.

## Required Technical Capabilities:

- Proficient at remote sensing modeling (e.g., data cleaning, feature selection, analysis, designing, building, and model assessment).
- Proficient at advanced spatial analysis and geoprocessing (e.g., image segmentation, object-based image analysis).
- Proficient at machine learning algorithms, familiar with algorithms like Generalized Linear Model, Random Forest, CART, and/or deep learning.
- Familiar with deep learning platforms (e.g., Keras, Tensorflow) and related classification and segmentation algorithms.
- Strong programming skills with Python and R.
- Experienced in Python packages like NumPy, SciPy, Geopandas, Matplotlib, Scikit-Learn, Keras; or similar packages in R programming environment like dplyr, ggplot, randomForest, XGBoost, etc.

## Professional Approach

Strong organizational, communication and writing skills, positive/enthusiastic attitude, passionate about professional pursuits, personable, ability and desire to learn, and attention to detail, strong moral and ethical personal standards. Enthusiastic about guiding and mentoring team members to reach team and organizational goals. Team player.

## Contact

Please send resume/cover letter to [cgudel@landiq.com](mailto:cgudel@landiq.com). Also visit our website for more information at [www.landiq.com](http://www.landiq.com).

