Luke Menard

Conservationist and software engineer with experience in full-stack web development, sustainable land and natural resource management, geospatial analysis, and data strategy. Seeking software development opportunities in the natural resources, conservation, and environmental spaces.

Education

The Flatiron School
Denver, CO
Full-Stack Web Development Immersive, 2019
- Technical Skills: Back-End Programming (Ruby, MVC Pattern, Rails, SQL, ORMs, ActiveRecord); Front-End Programming (JavaScript, Component Pattern, React.js, Redux)

Yale University, School of Forestry and Environmental Studies
New Haven, CT
Master of Environmental Management, 2017
- Technical Skills: Geospatial Software Design (Python, ArcPy, JavaScript, Google Earth Engine); Vector- and Raster-Based GIS (ArcGIS, QGIS); Remote Sensing (ENVI); Regression Modeling (R); Forest Growth and Yield Modeling (FVS, Woodstock)

Amherst College
Amherst, MA
B.A. Environmental Studies, 2012

Relevant Experience

Agrarian Labs   May 2018 - June 2019
Denver, CO
Data Strategist, Data and Analytics Lead (May 2018 - Nov. 2018)
- Provided real-time monitoring, novel analytics, and visualizations of agronomic, machine utilization, and spatial data that improved the efficiency and profitability of operations for over 20 large-scale farms.
- Optimized and streamlined client-facing data delivery from nearly 100 underutilized reports to 5 actionable Tableau dashboards of KPIs and metrics, improving usability and year-to-year client retention.

Yale University   November 2017 - May 2018
Pitakele, Sri Lanka
Postgraduate Fellow in Tropical Forest Conservation
- Recorded, measured, and managed a traditional Sri Lankan tree garden.
- Contributed to an electronic guidebook on indigenous silviculture, agroforestry, and international development.
- Constructed a tea plantation to be used as a demonstration site and educational resource at a tropical field research station.
- Conducted interviews with 30 village families to gain in-depth knowledge of local agricultural practices and tree garden cultivation.

Denver, Colorado

+1 413-658-4758

lukemenard@gmail.com

github.com/lukemenard

linkedin.com/in/lukemenard

SKILLS

Professional Skills
- JavaScript
- Ruby
- Rails
- React.js
- Redux
- Python
- R
- Vector- and raster-based GIS
- Remote Sensing (ENVI)
- Google Earth Engine
- Data Visualization (Tableau)
- Adobe Creative Suite

Language Skills
- Intermediate Russian
- Intermediate Latin
- Basic Arabic
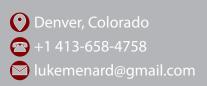- Basic Sinhala

AFFILIATIONS

Professional Affiliations
- North American Cartographic Information Society
- Society for Conservation GIS
- Society of American Foresters
- The Yale School Forests

Club Affiliations
- The Spatial Collective (co-founder)
- Conservation Finance Student Interest Group

Yale University
Aug. 2017 - Nov. 2017

Eastford, CT

Research Assistant, Ashton Silviculture and Forest Ecology Lab

- Collected tree measurement data to monitor the response of understory plant diversity to unique microsite position and degree of disturbance within gaps.
- Analyzed regeneration at four sites with distinct distinct soil types and topographic positions across New England.
- Examined the effects of herbicide applications and ground-level disturbances of varying intensities on the growth and competitiveness of common northeastern invasive plant species.

The Yale School Forests
May 2017 - Aug. 2017

Eastford, CT

Apprentice Forester

- Prescribed silvicultural treatments and marked timber harvests to meet the ecological, financial, and educational goals of an 11,000-acre forest.
- Performed long-term and operational forest inventories, conducted road and trail evaluations and maintenance, and marked property and forest stand boundaries.

New Canaan Land Trust
Oct. 2016 - May 2017

New Canaan, CT

Geospatial and Cartographic Consultant

- Designed a map of land trust properties and land holdings, which will be disseminated to town members in print and housed on the group's website as an ArcGIS Story Map.
- Conducted financial analyses to examine the benefits of open space to the New Canaan community.
- Used municipal taxlot and ecological data to assess the suitability of land parcels for purchase and determine priority land for future open space acquisitions.

Ucross High Plains Stewardship Initiative
Aug. 2016 - May 2017

New Haven, CT

Geospatial Researcher

- Consulted with the TomKat Foundation and western ranchers to produce the first map of ecologically regenerative rangelands in the United States.
- Researched threats to the greater sage-grouse within its current range and created an ArcGIS Story Map outlining species-specific conservation challenges.
- Assisted the development of a real-time sagebrush monitoring platform in ArcGIS and Google Earth.

Ecotrust
Jun. 2016 - Aug. 2015

Portland, OR

Forestry and Ecosystem Services Intern

- Spatially tracked forest harvest intensity in the Pacific NW using remotely-sensed data.
- Used geospatial software to estimate landscape-level effects of management regime shifts in industrial forest companies on the abundance of Pacific NW forest resources.
- Compared carbon storage and wood production potential of forestland managed to FSC standards with commonly used industrial management practices.
- Surveyed users of an online forest mapping and growth-and-yield modeling tool to better understand and market to the tool's audience and inform feature development.