

Ellen D. Furness

GIS Analyst, Web Developer, Biologist

Resume

Skills

ArcGIS Suite, Janus

Biological Research

Web Development

Hobby/Interest

Snowshoeing

Hiking alleys with my dog

Working on my REACT Portfolio

Watching PBS documentaries

Continuous Learning, GIS courses at University of Colorado

Always reading web development books

- **University of Denver, Full-Stack Web Development**
 - **Projects:** Bike station App using JavaScript Web API.
 - <https://github.com/bward3/spokes-people.git>
- **Portfolio:** <https://efurness.github.io/ellen-s-react-portfolio/>
- **Biologist research experience:** Working on projects involving surveying, mapping, and monitoring of ecological resources.
- **Master's Degree of Science, GIS, University of Denver.**
- **ESRI ArcGIS suite.** Graduate project mapping study of Three-toed woodpecker in old growth forests, Rocky Mountains.

Work History

2023-03
- present

Associate GIS/Geospatial Analyst

CACI International, Fort Collins, CO

- Collected, compiled, analyzed integrated Geographic Information Systems (GIS) data, remote sensing and orthoimagery.
- Leveraged skills in modeling, rendering and plotting to visually represent geospatial data.

Biologist, Website maintenance, GIS, 2010

National Park Service, Air Resources Division, Lakewood, CO

- Assisted Webmaster in the design, maintenance, and conversion of the Air Resources Division websites to XHTML using Adobe Dreamweaver/ColdFusion.
- Created GIS maps, reports and documents.
- Assisted Chief Biologist in analysis of air pollution in National Parks

Website Builder, 2009

Colorado College

- Website design and maintenance of
 - Geology Department and Professors' websites.
 - Integrated Solid Earth Sciences (ISES) Antarctica website
- Provided front-end website development using Dreamweaver and other editing software.

GIS Technician, 2001

US Forest Service, Pikes Peak National Forest

- Combined the use of aerial photographs, Digital Ortho Quads, Orthoimagery to interpret major vegetation/forest types for the Turkey Creek watershed
- Use of GIS ArcInfo and ArcEdit Tools.
 - Digitized heterogeneous vegetation polygons onto DOQ's.
 - Set up ArcInfo watershed/riparian/vegetation coverages for final maps.
- Verified final vegetation maps.
 - conducted Region 2 CSE Common Stand Exams.

BAER Team Technical Specialist/Project Leader, 2000

US Forest Service

- Burned Area Emergency Rehabilitation (BAER) projects in watershed assessment of burned areas, aerial reconnaissance by helicopter, topographic mapping of treatment sites and hydrophobicity soil testing.
- As Project Leader and BAER Team Trainee, led technicians in conducting rehabilitation treatment plans that contributed to Final Burned Area Rehabilitation Reports.

Education

2022-02

Full-stack Web Development, Bootcamp

University of Denver

GIS, Geographic Information Systems, M.S. Masters of Science, 2006

University of Denver

Graduate Teaching Assistantship. GIS graduate projects.

Population Biology, M.S Masters of Science, 1995

University of Colorado, Boulder

Graduate teaching assistantship.

Master's Thesis Paper

- ◦ Conservation of Psittacine Species in a Park System.

Independent research of Northern Red-shafted Flickers (*Colaptes auratus*).

- ◦ monitoring of nesting pairs for daily activity levels, foraging behavior and use of feeding sites.

Research Assistant, La Selva Research Station, Costa Rica

- ◦ Group project of individual versus group foraging for the *Paraponia ant.*

Biology, B.A., 1989

Colorado College

- Behavioral Ecology of Mammals. Wilderness Field Station in Ely, Minnesota (BWCA).
- Worked at the National Institutes of Health on genetic research project.

Volunteering

Boulder Flood Relief 2013-2014

Production Assistant for Kamchatka Wildlife Documentary

Defenders of Wildlife

Volunteer for Conservation Treaty Support Fund supporting

- CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora.
 - World Wildlife Fund
 - TRAFFIC

Awards

Above and Beyond award, US Forest Service

Certificates

Full-stack Web Development, University of Denver

Burned Area Emergency Rehabilitation, US Forest Service