# Ellen D. Furness

GIS Analyst, Web Developer, Biologist

#### Resume

#### **Skills**

ArcGIS Suite, Janus

**Biological Research** 

Web Development

## Hobby/Interest

Snowshoeing
Hiking with my dog
Working on my portfolio website
Watching PBS documentaries
Continuous Learning -- GIS courses,
Web

- · University of Denver, Full-Stack Web Development
  - Projects: Bike station App using JavaScript Web API https://github.com/bward3/spokes-people.git
  - o 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

- Collected, compiled or integrated Geographic Information Systems (GIS) data, remote sensing and orthoimagery
- · Analyzed still and motion imagery and data

#### Biologist, Website Developer, 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.
- · Creating GIS maps, reports and documents.
- · Assisted Chief Biologist, air pollution, National Parks

#### GIS Technician, 2001

US Forest Service, Pikes Peak National Forest

- Used aerial photographs, Digital Ortho Quads, Orthoimagery to interpret major vegetation/forest types
  - Turkey Creek watershed
  - Digitized heterogeneous vegetation polygons onto DOQ's GIS Info/Arc Edit Tools
  - Set up Arc Info coverages watershed/riparian/vegetation for final maps
- Collected, verified digitized vegetation maps.
- 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
- · Received certificate for BAER work called Above and Beyond
- As Project Leader and BAER Team Trainee, led technicians in conducting rehabilitation treatment plans that contributed to Final Burned Area Rehabilitation Reports

#### Website maintenance and design, 2009

Colorado College

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

### **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** 

Population Biology, M.S Masters of Science, 1995

University of Colorado, Boulder

Biology, B.A., 1989

Colorado College

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

# **Volunteering**

Boulder Flood Relief 2013-2014

Production Assistant for Kamchatka Wildlife Documentary Volunteer for Conservation Treaty Support Fund supporting

• CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora

## **Certificates**

Full-stack Web Development, University of Denver

**Burned Area Emergency Rehabilitation, US Forest Service** 

Above and Beyond award, US Forest Service