# Ellen D. Furness

GIS Analyst, Web Developer, Biologist

#### Resume

# **Skills**

ArcGIS Suite, ArcGIS Pro

**Biological Research** 

Web Development

# Hobby/Interest

Snowshoeing and cycling
Hiking with my dog
Working on my REACT Portfolio
Watching PBS documentaries
Continuing GIS courses at CU

- · University of Denver, Full-Stack Web Development
  - Projects: Bike station App using JavaScript Web API.
    - https://github.com/bward3/spokes-people.git
  - REACT Portfolio: https://efurness.github.io/ellen-s-react-portfolio/
- Master's Degree of Science, GIS, University of Denver.
- Biologist research experience: Working on projects involving surveying, mapping, and monitoring of ecological resources.
- **ESRI ArcGIS suite.** Graduate project mapping study of Three-toed woodpecker in old growth forests, Rocky Mountains.
- Detail-oriented team player with strong organizational skills managing multiple priorities with a positive attitude.
- · Strong willingness to take on added responsibilities to meet team goals with accuracy.

# **Work History**

# 2023-03 - present

# **Associate GIS/Geospatial Analyst**

CACI International, Fort Collins, CO

- Collected, compiled, analyzed integrated Geographic Information Systems (GIS) data, 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 websites and the 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 to digitize heterogeneous vegetation polygons onto DOQ's.
  - Set up ArcInfo watershed/riparian/vegetation coverages
- · Verified final vegetation maps, conducting Region 2 CSE's

#### 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

• o Conservation of Psittacine Species in a Park System.

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

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

Research Assistant, La Selva Research Station, Costa Rica

• o 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
  - o CITES, World Wildlife Fund, TRAFFIC

# **Awards**

# Above and Beyond, US Forest Service

# **Certificates**

**Full-stack Web Development, University of Denver** 

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