

Anna Capels

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EXPERIENCE

Data Fellow at U.S. Census Bureau

June – August 2024

- Selected from an applicant pool of 4,500 with an acceptance rate of 2% as part of the Coding it Forward Fellowship, a program that empowers early-career technologists to explore technology careers in government
- Engineered an automated data wrangling pipeline to clean and reformat over 300 million data records to create longitudinal datasets supporting the Decennial Data Digitation and Linkage project
- Implemented parallel processing using Python shortening run time by over 500%
- Presented actionable insights to a wide variety of technical and non-technical audiences and stakeholders

Research Assistant – Dr. Seger | Fort Collins, CO

August 2022-Present

- Data collection for a diverse range of cognitive psychology experiments (formats include virtual reality and computer programs) across multitudes of topics such as investigating risky behavior in relation to sensation seeking, behavioral mechanisms of Pavlovian biases, and categorization in the use of decision making.
- Utilized technical expertise and scientific thinking to aid in the creation of a PsychoPy experiment showcasing strong organizational and communication
- Conducted thorough research to assist composing a literature review, overseen by doctoral student and PI

Research Assistant – Dr. Aichele | Fort Collins, CO

December 2022-Present

- Strong organizational and data management skills by inputting over 1000+ data entries
- Created visual self-organizing maps (SOMs) looking at cognitive profiles to help inform stockholders of progress

Nanny

Summer 2016-December 2023

- Cared for 7 and 3-year-old siblings. Organized fun and enriching activities and provided emotional support during the school year. Activities included art projects, outdoor activities, preparing meals, and academic tutoring.

Youth Leader

Summer 2019- Summer 2021

- Mentored and supported several youths of various ages through weekly meetings and events. Led group discussions on diversity, inclusion, and personal growth.

PROJECTS

Lyric Analysis | Python (Beautiful Soup, NLTK, NMF, Seaborn, Matplotlib)

- Web scraping for HTML parsing, data extraction, and session management to get song titles and lyrics
- Implemented data manipulation, text processing, topic modeling, and data visualization for a clear efficient analysis and presentation
- Integrated calculating correlation coefficients, performing sentiment analysis, applying Markov modeling for text analysis, and working with HTTP requests and networking for data retrieval

Stock Prediction and Risk Analysis | Python (Pandas, NumPy, Matplotlib.pyplot, Seaborn)

- Utilized Yfinance to perform stock risk analysis by data processing and visualization with financial techniques for trend assessment, risk evaluation, and informed investment decision-making
- Crafted appealing data visualizations with statistical concepts such as KDE, simple linear correlations, and VaR for easy communication of financial insights
- Developed and implemented multiple Monte Carlo simulations to model predicted stock price movements based on historical data

Tea Leaf Disease Detection | Python (TensorFlow, Keras)

- Employed image processing and computer vision (PIL), deep learning frameworks designing CNN model architecture using the sequential API, and evaluating models using classification reports and confusion matrices
- Experienced in various aspects of deep learning, including dataset preprocessing, augmentation, handling techniques, training, and evaluating models with different layer types, regularization using dropout layers, and model compilation with the Adam optimizer
- Achieved overall accuracy of 84% while also demonstrating high precision, recall, and F1 scores accurately predicting accurate and reliable labels for a diverse set of samples

Portfolio Website | HTML, CSS, JavaScript

- Designed and developed a dynamic portfolio website using HTML, CSS, and JavaScript, showcasing personal projects and skills.
- Integrated DNS management techniques and SSL/TLS encryption to ensure seamless and safe website accessibility.
- Utilized modern front-end frameworks and libraries, such as Bootstrap, to enhance the website's aesthetics and functionality.

EDUCATION

Colorado State University

B.S. in Psychology; Minor in Applied Data Science

Cumulative GPA: 3.9

Relevant Course Work: Statistical Data Analysis, Applied Statistical Methods, Culture and Coding using Python, Psychology of the Individual in Context, Cognitive Psychology, Social Problems, Research Design and Analysis I & II, Written Arguments

Fort Collins, CO

Expected Graduation: 2024

RELEVANT SKILLS

Technical:

- Python
- R Studio
- R Studio SQL
- SQL
- Tableau
- MatLab
- HTML/CSS
- Microsoft Office
- Google Workspace
- Qualtrics

Other:

- Collaborative Communicator and Active Listener
- Adaptive Learner and Creative Thinker
- Data Analysis and Visualization
- Manage Multiple Concurrent Tasks and Deadlines
- Conflict Resolution Facilitation and Mediation

Languages:

- Spanish | Written, Reading, and Verbally Fluent

HONORS & AWARDS

-Dean's List 2021-Present

-Seal of Bilingualism

-Advanced Placement Endorsement

-Honor's Academy Endorsement

VOLUNTEER

Food Bank

2013-Present

Worked with a team of volunteers at the Larimer County food bank to organize food drives and local community events to help to raise awareness about food insecurities in Northern Colorado.

Chinese and Korean Heritage Camp

2022-Present

Facilitated and assisted in organizing activities for internationally adopted children of all ages while promoting inclusivity and creative problem solving through team collaboration.