# Katie Taylor

## <u>katietaylor.info</u> | <u>linkedin.com/in/katherinetaylor24/</u> | <u>github.com/katietay</u>

Creative and detail-oriented software developer and UX enthusiast with nearly 3 years of experience managing web content, enhancing accessibility, and driving SEO strategies for higher education and nonprofit organizations. Proven track record in improving user experience, increasing web traffic, and delivering innovative solutions through user-centered design. Passionate about inclusive design and optimizing digital ecosystems.

## **Skills**

#### **Interpersonal Skills**

Team Player, Leadership, Mentorship, Growth Mindset, Communication, Problem-Solving, Self-Direction, Time Management, Organization, Collaboration, Customer Service, Inclusive

## Technical Skills

Languages: JavaScript, ReactJS, Angular, HTML, PHP, CSS, Java, Python, SQL, C, C++, C#

Operating Systems: Linux, macOS, Windows

Web, UX, & Development Tools: SEO, Accessibility, WCAG Compliance, Web Analytics, Google

Analytics, Siteimprove, GitHub, Figma

**Methodologies & Concepts:** Agile Development, Test-Driven Development, Clean Code Practices, Object-Oriented Programming, Data Structures, Accessible Design, UI/UX Design, Social Media

#### **Education**

## Colorado State University — B.S. Computer Science,

*Aug* 2022 – *Aug* 2025 | *Fort Collins, CO* 

Coursework in software engineering, test-driven development, and Agile methodology with hands-on experience in GitHub-based collaboration. Served as a peer mentor for the 2024–2025 academic year. Graduated with a 3.23 GPA and awarded Grace Hopper Conference scholarships in 2023 and 2024.

#### Montessori Education Center of the Rockies — AMS Elementary I Certificate

*May 2019 – May 2020 | Boulder, CO* 

Trained in Montessori pedagogy with a focus on student assessment, classroom leadership, lesson planning, and multi-year learning cycles.

## **Stephen F. Austin State University** — B.S. Health Science (Community Health Concentration),

Psychology Minor

Aug 2015 – Dec 2016 | Nacogdoches, TX

Graduated Magna Cum Laude with a 3.67 GPA. Completed a community internship and gained experience in grant writing, surveying, and outreach programs.

#### **Experience**

## Web Developer

Off-Campus Life, Colorado State University – Fort Collins, CO | Nov 2022 – Present

• Implemented WCAG 2.1 accessibility improvements across two university-affiliated websites, including alt text, heading structure, contrast, and keyboard navigation.

- Led accessibility training for the Marketing Team, enhancing web content practices across social, print, and digital channels
- Collaborated with professional staff to align web updates with university branding and ADA compliance standards.
- Co-managed social media accounts with the marketing manager for an audience of over 3,000 followers.

## **Food Operations Coordinator**

RamRide at Colorado State University (Off-Campus Life) – Fort Collins, CO | Jan 2023 – August 2025

- Promoted from Night Ops to Food Ops Coordinator in Aug 2023 for excellence in logistics and team leadership.
- Planned and arranged deliveries tallying over 20,000 lbs of food delivered to more than 700 students, staff, and faculty of CSU.
- Reduced average delivery wait time by 20% by overhauling scheduling and route planning workflows.
- Coordinated between student staff, volunteers, and partner organizations to meet operational and dietary needs.

#### Freelance Web Developer

Katie Taylor Web Design- Loveland, CO | Dec 2022- Present

- Designed, built, and maintained custom websites for 5+ local clients across health, education, and nonprofit sectors.
- Boosted one client's organic traffic by 30% in three months using SEO optimization (metadata, keyword strategy, and site structure).
- Managed full development lifecycle, including Figma mockups, client demos, GitHub deployment, and ongoing support.
- Ensured ADA and WCAG 2.1 compliance through testing with screen readers and color contrast tools.
- Handled client communications, invoices, and legal agreements independently.

## **Lead Montessori Guide**

St. Vrain Community Montessori – Longmont, CO | July 2019 – July 2022

- Created and maintained a distance-learning program that enabled 50+ lower elementary students to access Montessori materials, lessons, and guides remotely from March 2020 to May 2021.
- Designed systems for tracking student progress, presenting lessons, and planning individualized student work plans.
- Supervised a total of 5 assistant guides over three years, conducted performance reviews, and facilitated ongoing professional development.
- Provided mentorship and created space for open dialogue around classroom management practices.
- Supported curriculum delivery for students ages 6–9 with an emphasis on independence, consistency, and hands-on learning.

#### Lead Montessori Guide

The Leadership Academy - Tyler, TX | July 2017 - May 2019

- Promoted to Lead Guide in 2018; mentored 2 new hires and developed conflict resolution protocols.
- Taught multi-age classrooms (ages 6–9), managed lesson cycles, and facilitated weekly parent communication.
- Designed classroom routines and assessment logs to align with Montessori standards.

#### Pre-K 3 Lead Teacher

Tanglewood Academy – Nacogdoches, TX | Aug 2015 – June 2017

- Promoted to Lead Teacher in January 2017 in recognition of leadership and classroom management.
- Supervised classroom assistants and designed lesson plans focused on early childhood development.
- Communicated with 30+ families through regular newsletters and parent-teacher conferences.

#### **Tobacco Grant Intern**

Healthy Nacogdoches Coalition – Nacogdoches, TX | May 2016 – Aug 2016

- Co-produced and aired 5 bilingual PSAs with a local radio station, reaching 10,000+ listeners.
- Conducted tobacco education workshops in English and Spanish for ~100 community members.
- Distributed 500+ surveys on tobacco use, digitized results, and presented findings to stakeholders.
- Maintained the coalition's Facebook pages serving over 2,000 followers

## **Projects**

- **Autonomous Terrain Navigation System** 2025 NASA/USDA/CSU Hackathon Developed an intelligent, autonomous pathfinding system for search and rescue in dynamic environments such as forests and lunar terrain. Focused on adaptive navigation and real-time decision-making without premade libraries, simulating rover behavior in high-stakes scenarios.
- Meat Grading Convolutional Neural Network 2024 USDA/CSU Hackathon
   Collaborated in a USDA-sponsored hackathon to design a neural network for automated beef quality grading using PyTorch and DeepLab. Built custom CNNs, applied Stratified K-Fold cross-validation, and developed both interactive and script-based workflows for robust model training and evaluation.
- Library Database System CS 430 Semester Project, Summer 2025
   Worked independently to create a library database system that integrated a search function for users to find authors, books, and which library and shelf within the system these items could be found.
- **Project Management System** *CS 415 Semester Project, Spring 2025*Worked in a team to design and implement a full-stack project management application using Java, React, and JavaScript across iterative development sprints. Applied advanced software engineering practices including unit testing, mutation analysis, static analysis, and automated test generation with tools such as JUnit, PIT, PMD, EvoSuite, and Mockito.

- Color Coordinate Generator Web App CS 312 Group Project, Spring 2025

  Designed and implemented a full-stack web application for creating color-by-coordinate activity sheets used in vision therapy. Built dynamic color assignment logic, coordinate tracking, and print-friendly rendering with Angular and a MySQL backend. Developed custom interfaces for color management with validation and accessibility compliance, emphasizing clean UX and robust input handling.
- Full Stack Chess Game Application CS 414 Semester Project, Fall 2024
  Contributed to developing a web-based chess platform with a Java backend and React frontend.
  Implemented gameplay logic, deployment scripts, and dev tooling for hot-reloading and structured server-client communication.
- Mobile-First Tour Optimizer CS 314 Semester Project, Spring 2024
   Collaborated with a team of four others to build a mobile-first travel planning app solving the Traveling Salesman Problem via optimized tour generation and distance-based RESTful APIs. Contributed significantly to the architecture and implementation using Java and ReactJS, applying Factory and Strategy design patterns for scalability.
- **Text-Based RPG Store and Inventory Simulator** *CS 214 Semester Project, Spring 2023* Built a multi-phase Java application simulating a role-playing game (RPG) environment, featuring store interactions, item trading, and inventory management. Developed modular object-oriented components for players, items, and a dynamic store system. Progressively added custom exception handling, attribute systems, and escrow logic to support complex in-game transactions.

#### **Awards**

- Grace Hopper Conference Scholarship Colorado State University, Fall 2024
  Awarded a full scholarship to attend the Grace Hopper Celebration in person the world's largest gathering of women and non-binary technologists. Awarded for my commitment to technology and professional development.
- Outstanding Student Employee Off-Campus Life, CSU, Fall 2023
  Recognized for exceptional commitment across multiple roles, including improvements to the Food Operations System and leadership as a Web Developer.
- Grace Hopper Conference Scholarship Colorado State University, Fall 2023
  Selected to attend the Grace Hopper Celebration virtually for contributions to the tech
  community and academic excellence.
- **President's List** *Stephen F. Austin State University, Fall 2016 & Fall 2015* Awarded for earning a semester GPA of 3.8 or higher.
- Who's Who Among Students in American Universities & Colleges SFASU, Spring 2016 Honored for academic achievement, campus involvement, and community service.
- **Dean's List** *Stephen F. Austin State University, Spring 2016* Recognized for maintaining a semester GPA of 3.5 or higher.