Wren Bandrowski *

ENGINEER / ARTIST / SUSTAINABILITY PROFESSIONAL

Professional Summary

Systems engineering graduate student specializing in Urban Resilience and Sustainability at CU Boulder, with two years at CDOT and a passion for transportation and environmental planning done right.

Notable Skills / Background

- Worked with CDOT for 2 years
- Experience with NEPA regulation and its associated processes
- Technical Documentation & Writing
- Stakeholder Engagement & Communication
- Self-directed and passionate
- Experience and passion for GIS
- Data analysis and research

March 2026

University of Colorado Boulder
Masters of Environment
Urban Resilience and Sustainability focus
Graduation - spring 2027

University of Arizona Tucson
Undergraduate in Systems Engineering
Graduated 2022

Professional Experience

Not in chronological order

COLORADO DEPARTMENT OF TRANSPORTATION

Engineer in Training
April 2024 to February 2025

- Leveraged R to analyze 64 million data points across 24 years of project records on asphalt and concrete usage, determining real-world road lifespans and informing CDOT cost-analysis
  - Built out a internal report on findings
- Updated public-facing documents to adhere to accessible standards
- Toured facilities to conduct reviews of manufacturing processes
- Through independent study, developed proficiency in a range of key areas

COLORADO DEPARTMENT OF TRANSPORTATION

Process Improvement
February 2023 to January 2024

- Completed GIS Scoping for Colorado Boulevard for the Environmental Team
- Improved team efficiency by by creating better on-boarding materials, advocating for regular team meetings
- Designed posters for the Transportation Research Board event
- Conducted 10+ interviews to write articles and create videos highlighting stories of innovations
- Improved OPI's website from a 45% accessibility compliance to a 90% compliance rate
- Wrote technical documents to record complicated processes and authored articles about innovative designs

Professional Experience, Continued

OZO COFFEE COMPANY

April 2025 - current

- Greet customers, record orders, and efficiently process payments
- Execute tasks in a fast-paced environment while balancing competing demands
- Work closely with colleagues and anticipate customer needs
- Foster a welcoming atmosphere by consistently providing friendly, courteous, and professional customer interactions

ASSOCIATION OF UNIVERSITIES RESEARCH FOR ASTRONOMY

Systems Engineering Intern
February 2020 - May 2021

- Collaborated with a team of five systems engineers to document and organize the Vera C. Rubin Observatory's systems as the telescope was being built, filling critical gaps in pre-existing documentation
- Utilized SysML modeling techniques in MagicDraw to identify and document risk states and develop mitigation plans
- Extracted and synthesized key information from complex technical documentation for use in system models
- Coordinated weekly with the systems engineering team to track progress, address challenges, and report updates to supervisors

Capstone Projects

CITY OF LAFAYETTE RESILIENCE PROJECT

January 2026 - current

Currently leading a year-long graduate capstone with the City of Lafayette, CO to develop a Resilience Hubs implementation plan. Resilience hubs serve as community anchors during crises — providing shelter, resources, health support, and safety during events like wildfires, extreme heat, flooding, and large weather emergencies. Working with a three-person team to build a Scope of Work and evaluate community needs that will guide Lafayette's resilience planning for the next few years

UNIVERSITY OF ARIZONA CAPSTONE PROJECT

Fluorinert and the Machine
August 2021 - May 2022

Led a Microsoft-sponsored capstone project to design and build a prototype two-phase immersion cooling test chamber for Microsoft's research division. The project addressed the significant water consumption of traditional server cooling by testing Fluorinert-based immersion cooling as a more sustainable alternative. Our team designed and delivered a functional vessel to submerge server components in Fluorinert, enabling Microsoft to observe contamination behavior at small scale before implementing in full data center containers.

- Personally selected to lead a team of 5-6 interdisciplinary engineers to design, build, and deliver a functional testing rig prototype from concept to completion
- Oversaw full project lifecycle as PM and Systems Engineer — including roadmap planning, system development, testing and verification, hardware troubleshooting, and budget management
- Directed fabrication of laser cut, CNC, and 3D printed components; assembled final prototype and presented to hundreds of visitors at the university's annual Design Day
- Cultivated a high-performing team environment through Agile scheduling, consistent communication, and an empathetic leadership style

MY WEBSITE **WRENBANDROWSKI@GMAIL.COM** **(360) 536 - 3378**