



MICHAEL TARBERT

ENGINEERING, COMPLEX
ANALYSIS, AND CLIMATE
CHANGE AND SUSTAINABILITY
SPECIALIST

OBJECTIVE

Engage in professional services that prepare and react to climate change to create more sustainable and equitable communities. Expand Innovation and remove barriers.

SKILLS & ABILITIES

Systems thinker specializing in climate change analysis, preparation, and strategic planning. Life-long learner eager to meet a challenge.

CERTIFICATIONS

Engineer in Training (EIT), Part
107 Remote Pilot, Climate
Change Professional Candidate

VITALS

829 SW Trenton St.

Seattle, WA 98106

T 406-396-2690

E Tarbert.michael.r@gmail.com

PROFESSIONAL EXPERIENCE

MAUL FOSTER & ALONGI, INC. (MFA), SEATTLE, WA

APRIL 2019 – DECEMBER 2021

Staff engineer focusing on natural resource management, engineering design and permitting, project management and strategic planning.

Climate Change Resilience Services

Lead MFA's climate resilience business and business development team. Responsibilities include assisting colleagues to understand how climate change may affect their projects, deciphering how to apply data and its limitations, and understanding external climate change applications to incorporate into design. Other activities include representing MFA at climate resilience events, contributing to teams with climate resilience components and building internal documentation for MFA to perform vulnerability and adaptation capacity assessments for environmental clean-up projects.

sUAS Mapping

Leads MFA's small, unmanned aircraft system mapping services, including collection of aerial photography and its analysis. Routinely communicates with clients to coordinate work product requirements, assists with surveyor establishment of ground control points and day-of site logistics. Perform aerial data collection using drones (automated and manual) to obtain photos and other data, which can then be analyzed using specialized photogrammetry software for the purposes of creating two- and three-dimensional work products. Data is used for engineering design, permitting, communication and marketing.

Sustainability Squad

Initiated need for internal sustainability team. Created team framework, short-term and long-term objectives, and coach team and individuals to reach sustainability goals. Currently leads the sustainability team, including facilitation of meetings, meeting planning, establishing action items, and establishing communications to notify entire company of progress, goals and how other individuals can get involved and make a difference.

Solid Waste Planning and Engineering

Contributes to a variety of solid waste management projects that range from engineering design for existing and conceptual facilities

in Oregon and Washington to analysis of waste diversion facilities. Other projects are focused on natural resource recovery of waste to process into usable products. Serves as a key member of the solid waste business development team.

Stormwater Services

Sample, analyze, design, and oversee construction of stormwater treatment systems for a variety of private and public clients, including solid waste and recycling facilities, lumber yards, quarries, and open public spaces. Designs often include performing return on investment and resilience analysis to determine the most cost-effective solutions for a variety of future design storms. Directs data collection and analysis efforts, manages the budget and design and supports other team members with tasks as needed.

KING COUNTY SOLID WASTE DIVISION, SEATTLE, WA

AUGUST 2018-APRIL 2019

Managed environmental compliance data for all closed and active landfills managed by King County. Included quarterly and annual compliance reporting and collecting field data. Assisted management and other engineers with transitioning data management and analysis to R instead of Excel to reduce processing time by ninety percent, and the potential for errors by nearly the same margin.

UNIVERSITY OF COLORADO, BOULDER, CO

AUGUST 2017-MAY 2018

Led and managed CU-Boulder's Social Innovation Pipeline Program, including planning events with vendors, internal and external stakeholders and managing external marketing to student body. Additional duties included preparing and executing lesson plans for Social Entrepreneurship (100-level course) and Global engineering (300-level course) and mentoring undergraduate students.

TETRA TECH, LONGMONT, CO

MAY 2017-NOVEMBER 2017

Internship program to support the government of Kenya to develop the smart city of Konza, just south of Nairobi. Responsibilities involved meeting with governmental and non-governmental organizations to implement city development policies. Additional duties included researching and presenting ideas to the City Consortium including sourcing and implementing smart city infrastructure, data collection and ownership, and equitable housing and access to resources.

RESILIENT ANALYTICS, BOULDER, CO

AUGUST 2016-JUNE 2018

Analyzed downscaled climate data for a variety of stakeholders and applications, including development of vulnerability indices, extreme event predictions, and detailed maps and interactive work products using programs such as MATLAB, R-Shiny and Tableau. Opportunity was given to present work to several stakeholders and at a conference, which was a highlight of the work I did with them.

MAUL FOSTER & ALONGI, INC., PORTLAND, OR

JUNE 2014-JULY 2016

Designed and oversaw upland and in-water environmental remedial actions, designed and oversaw landfill openings and closures, and designed stormwater treatment and conveyance systems. Developed into a key member of the field engineering team and contributed to research and implementation of technology accelerators for fieldwork applications.

EDUCATION**UNIVERSITY OF COLORADO, BOULDER, CO, CIVIL SYSTEMS ENGINEERING, MSCE**

GPA: 3.8; ENGINEERING IN DEVELOPING COMMUNITIES CERTIFICATE; SOCIAL INNOVATION PIPELINE SCHOLAR

Coursework included sustainable community development, fieldwork methods, lifecycle analysis, civil engineering systems, system dynamics, and advanced environmental engineering. Systems thinking and consideration of equitable outcomes for developing and developed communities was at the forefront of the program's curriculum. Master's thesis evaluated vulnerability of surface transportation in United States cities, creating a ranking system to establish America's most vulnerable cities.

UNIVERSITY OF PORTLAND, PORTLAND, OR, CIVIL ENGINEERING WITH AN ENVIRONMENTAL EMPHASIS, BSCE

GPA: 3.6; MINOR IN ENVIRONMENTAL SCIENCE; PRESIDENT OF ENGINEERS WITHOUT BORDERS; PEER MENTOR AND RESIDENT ASSISTANT

Coursework included Environmental Engineering, Water Resources Management, Hydraulic and Fluid Mechanics, Ecology and Environmental Chemistry. Extra-curricular activities including club ultimate frisbee and cycling, peer mentoring, freshman workshop leader, resident assistant, and environmental engineering lab technician.

PRESENTATIONS**NORTHWEST ENVIRONMENTAL BUSINESS COUNCIL, OREGON INFRASTRUCTURE CONFERENCE, SEPTEMBER 2021**

Presented to government and industry leaders on the importance of including vulnerability and adaptation assessments at the forefront of large investments to increase resiliency and decrease regret. Presentation included discussion of the theory behind vulnerability assessments including review of IPCC data, its limitations and the possibilities of tools and frameworks applicative the unique problems our communities and agencies are facing.

NORTHWEST ENVIRONMENTAL BUSINESS COUNCIL, BACK2THEFUTURE: ASSESSING HISTORIC PROJECTS FOR SUSTAINABILITY, APRIL 2021

Led presentation team to discuss climate change trends, vulnerability, and adaptation and how lessons learned from historical efforts can guide future project planning, especially for environmental remediation projects. Presentation included reviewing current climate trends, connecting the impacts to existing environmental problems

MFA TECHNICAL SYMPOSIUM, DECEMBER 2019

Developed and led presentation discussing the impacts of climate change to the Pacific Northwest and the company. Presentation included the basics of greenhouse gas accounting, lifecycle analysis, concept of adaptation and mitigation, and a review of goals and frameworks applicative to environmental and engineering work.

PACIFIC NORTHWEST CLIMATE CHANGE CONFERENCE, POSTER SESSION, SEPTEMBER 2019

Attended the 2019 Pacific Northwest Climate Change Conference. Presented during poster session detailing surface transportation vulnerabilities for over 7,000 American cities. Analysis resulted in a ranking of all cities, development of vulnerability compasses and summary of results for each climate type. Summary has been used to compare vulnerability across several cities to determine resilience funding pools for individual municipalities.

UNIVERSITY OF NORTH CAROLINA WATER, ENERGY AND FOOD NEXUS CONFERENCE, SYSTEM DYNAMIC MODELS FOR LAND-USE CHANGE, APRIL 2018

Presented on the systems theory of land-use change using change of state theory to model long-term land-use trends in tandem with population, economic and sustainability data.

EXTRA-CURRICULAR INTERESTS

CIVITAS SYSTEMS, LLC, CO-FOUNDER AND PRESIDENT

Co-founded company to pursue complex science and system dynamics-related work with public and private entities. Co-developed company's mission, values, and theory of change. Prepare contracting paperwork, direct and edit website and blogposts and assist with marketing. Work includes complex and large data analysis, summarizing technical information for general readers and users, authoring, and reviewing reports and synopses, and coordinating with staff and stakeholders.

VISUAL ART DESIGN

Passionate about telling stories through visual art design, whether it is a PowerPoint or other type of presentation, acrylics on canvas, or developing user-interfaces. Creativity, forward thinking, product testing and stakeholder engagement are key to the successes of these tailor-made products.

MUSIC AND VIDEO PRODUCTION

Utilizes LogicPro X, FinalCutPro and Adobe Creative Cloud to record and produce music, voice-overs, and soundtracks for films. Also direct, produce and edit film to create informational, marketing and music videos. Passionate about capturing the vision and energy of stakeholders to create moving and effective storylines.

CYCLING

Avid cyclist that promotes alternative transportation for friends, colleagues and neighbors including holding workshop clinics in our neighborhood parking lot. Advocates for safer cycling routes and for healthier streets.

REFERENCES

AVAILABLE UPON REQUEST