Tarrik Quneibi **(517) 206-8821** **tarrikq@umich.edu**

Education

University of Michigan December 2022
Master of Science in Environmental Engineering
Ann Arbor, Michigan 48109

University of Michigan December 2021
Bachelor of Science in Environmental Engineering
Ann Arbor, Michigan 48109

Work Experience

University of Michigan Jan, 2022 - Present
Research Assistant

- Automated linear regression model in R for total organic carbon analysis as new data comes in.
- Partially automated data management/analysis in R for multiple parameters.
- Ran physiochemical and biological analysis on water samples including DNA extractions, dissolved oxygen, and ATP.
- Acted as liaison between project team, city personal, and outside companies.

City of Ann Arbor – Ann Arbor Drinking Water Treatment Plant
Water quality intern May, 2021 – Nov, 2021

- Created r code to analyze particle counter and historic softening data for use by operators to optimize plant operations during storm events.
- Ran statistical analysis to determine correlation between multiple water treatment plant parameters to assist with dosing requirements.
- Experimented with ozone decay models to determine the percent overdosing of ozone inside the contactors.

Skills

EPAnet	R studio	Google Earth Engine API
SUMO	Python	Microsoft Word
GIS	MATLAB	Microsoft Excel
SWMM	SQL	Microsoft PowerPoint

Projects

Water conveyance for new build

- Determined pipe size, length, slopes, and cost analysis for gravity sewer system which serviced five buildings by utilizing AutoCAD data files for elevations and distances along with SWMM modeling.
- Sized pipes and water tower for potable water distribution to the five buildings to provide sufficient pressures at the top floor and in the basement levels.

Water supply distribution system optimization

- Sized pump, water tower and replacement pipes for addition into an existing water distribution system.
- Created EPAnet model for pressure simulations during various flow scenarios.
- Performed cost analysis to determine the least cost option while meeting system demands.

Examination of the effect of antecedent soil moisture on runoff during storm events

- Created python function which pulled spatial data collections containing environmental data.
- Created code in r studio to clean, analyze, and visualize all satellite and field sensor data.

Achievements

Python 3 Certification - Earned specialization certificate from Coursera
Applied Data Science Certification - Earned specialization certificate from Coursera
Pelham graduate scholar - Joined Pelham Scholars program based on academic achievement, diversity, and inclusion