# THOMAS THOMPSON, PE

1010 Emerald Ave Haddon Township, NJ 08108 856-745-9504 tommythompson714@gmail.com

#### TECHNICAL SKILLS

Expert: Python (pandas), Visual Basic for Applications, Excel, Access, Publisher

Proficient: R, C++, Arduino

Experienced: SQL, JavaScript, Django, React, ArcGIS, AutoCAD

## **EMPLOYMENT EXPERIENCE**

# Remington & Vernick Engineers – Municipal Services Group *Project Engineer*

Cherry Hill, NJ April. 2021 – Present

Design civil and municipal engineering projects for local municipalities and school boards

- Estimate and refine total construction costs for roadway rehab, site resurfacing, and park improvement projects
- Utilize VBA and JavaScript to improve the efficiency of the overall design process by automating regular tasks
- Analyze data collected from curb ramp inspections to assess compliance with Americans with Disabilities Act of 1990
- · Review site plans for permitting and compliance with local zoning and planning codes, ordinances, and regulations

# Philadelphia Water Department – Green Stormwater Infrastructure Unit Environmental Engineering Specialist

Philadelphia, PA

December, 2018 – March, 2021

- Reviewed stream restoration design plans in local, urbanized watersheds
- Managed engineering consultants along project development from inception through construction
- Assessed urban stream corridors for exposed civil infrastructure using GIS
- Analyzed hydrological data from USGS streamflow gauges to predict watercourse flow behavior
- Coordinated with numerous local, state, and federal utilities and governmental agencies for project permitting

# Philadelphia Water Department – Planning & Research Unit Environmental Engineer 2

Philadelphia, PA

July, 2016 - December, 2018

- Contributed to the development of a long-term plan for implementing a large city utility's energy conservation strategies
- Assisted Energy Group supervisor in managing over 250 utility accounts of department-wide energy usage
- Automated the QA/QC of daily biogas and electricity production from a wastewater treatment cogeneration facility with VBA
- Developed predictive multiple linear regression energy consumption models for more than 20 water/wastewater facilities
- Optimized an inventory of greenhouse gas emissions used to meet citywide goal of 80% reductions by 2050
- Created a conceptual analytical calculation tool in Python for dynamic and efficient pumping recommendations

# Civil, Architectural, and Environmental Engineering Dept., Drexel University Research Lab Assistant

Philadelphia, PA March to September, 2015

- Conducted longitudinal dissolved gas experiment on three algal bioreactors
- Assisted Ph. D. candidate with exploratory data analysis and inferential statistics in R
- Published a VBA script—later translated to Python—fixing a bug in an analytical instrument's data analysis software
- Trained two laboratory assistants in performing regular laboratory duties
- Developed a markup-based wiki page for the laboratory's Standard Operating Procedures

#### **PUBLICATIONS**

Price, J.R., **Thompson, T.J.**, Parish, J. (2016) "Automated Parsing of a LabSolutions Batch Results File (ASCII Output) When Using a Spreadsheet or Statistical Package to Summarize Data." *Technical Note: Shimadzu Scientific Instruments*.

## HONORS, CERTIFICATIONS, AND ORGANIZATIONS

Professional Engineer, Delaware License #: 23854, Pennsylvania License #: PE091267 Steven Giegerich Memorial Scholarship for demonstrating kindness, humility, generosity, and a love for work, 2015 A.J. Drexel Academic Scholarship, 2011 – 2016

#### **EDUCATION**

Drexel University, Pennoni Honors College Bachelor/Master of Science in Environmental Engineering Minor in Ecology, Accounting Philadelphia, PA Graduated – June, 2016

Cumulative GPA: 3.95, Dean's List for all quarters