WILLIAM BARTOS

16 Indian Creek Road | Holmdel, New Jersey 07733 | 732-275-2740 | billybartos@gmail.com | willbartos.io |github.com/williamBartos

Experience

Engineer/EIT **Maser Consulting P.A.** **June 2015-Present**

- Developed Python applications to automate review processes, leading to over a 90% reduction in task time
- Took the initiative and coordinated with management to develop software for business development
- Built computational models for simulating large scale water distribution systems in WaterCAD
- Utilized GIS and SQL queries to search New Jersey's geospatial databases to create high quality analytical maps
- Created new AutoCAD tools and techniques which significantly reduced drafting time, enhanced quality, and reduced errors
- Engineered solutions for water projects at Six Flags Great Adventure for new attractions and infrastructure improvements

Engineer **Rutgers University Water Resources Cooperative Extension** **Jan 2014- May 2015**

- Investigating the impact of rain gardens as part of a Regional Stormwater Management plan for the Troy Brook Watershed
- Engineering hydrologic models in HydroCAD to deliver stormwater diversion solutions utilizing best practices

Engineer **Alzo International and Pharmetic Manufacturing** **June 2014-Sept 2014**

- Participated in the research, testing, and development of novel chemical products for a wide range of industries

Research Assistant **Rutgers University Department of Microbiology and Biochemistry** **May 2013 – August 2013**

- Researched the aerobic and anaerobic degradation of polychlorinated dibenzo-p-dioxins/furans in polluted waterways

Education

School of Engineering **Rutgers, the State University of New Jersey** **Fall 2010-May 2015**

- Bachelors of Science, Bioenvironmental Engineering, May 2015, GPA: 2.991
- Coursework: Intro to Computer Science (Java based course covering CS theory, algorithms and software engineering principles). Grade: A

Projects

Shop Drawing Stamp and Transmittal Generator

- A Python based program to interpret shop drawing spreadsheets and generate forms for project review processes
- Automates the administrative portion of a submittal review from over thirty minutes to less than one minute
- Worked with management to distribute the program companywide

Raspberry Pi Weather Sensor

- Utilized a Raspberry Pi and Python to measure local weather and graph sensor data to the web in real time

Computation Fluid Dynamics in Python

- A series of 1D and 2D finite difference solving CFD simulations written in Python utilizing advanced fluid mechanics

Skills

Languages and Software: Python, Java, JavaScript, HTML, CSS, Linux, Git