WILLIAM BARTOS

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Experience

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

- Developed Python applications to automate review processes, reducing administrative time while enhancing quality
- Took the initiative and coordinated with management to develop software for business development as part of my billable time
- Built computational models for simulating large scale water distribution systems in WaterCAD
- Created new AutoCAD tools and techniques which significantly reduced drafting time, enhanced quality and reduced errors
- Participated in the design of a wastewater treatment and reuse system to save a confectionary factory over $1million/year
- Designed a 32,000 ft. water main for Six Flags Great Adventure to increase system resilience and allow for future expansion
- Engineered solutions for water projects at Six Flags Great Adventure for new attractions and infrastructure improvements
- Conducted inspections and GIS mapping to identify issues and develop solutions for Jersey City's aging infrastructure
- Improved the operating efficiency of the Manasquan Water Treatment plant by engineering a new lime slurry feed system

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 rain gardens

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

- Participated in the research, testing, and development of novel chemical products for a wide range of industries
- Assisted in the scale up and mass production of new products at the company's on site chemical manufacturing plant

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
- Demonstrated effective attenuation of contaminants through sediment microcosm studies and HPLC analysis

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

Projects

Shop Drawing Log Tracker and Generator

- A Python based program to interpret shop drawing spreadsheets, track submissions, and generate content for client interaction

Computation Fluid Dynamics in Python

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

Raspberry Pi Weather Station

- Utilized a Rasperry Pi and Python applications to record temperature and GPS coordinates in real time

Skills

- Python, JavaScript Linux, OSX, Windows, Git, AutoCAD Civil3D, ArcGIS, WaterCAD, HydroCAD