

## **SYMMARY**

Results-driven, goal-oriented Environmental professional with a proven track record of 4+ years of high tech industry experience. Looking for a position of a full-time Engineer in a company specializing in Environmental Engineering, where my combined graduate studies and professional; experience in an international engineering consulting firm and projects would improve the growth of the organization. Areas of expertise include:

- **Water & Wastewater Projects:** component in design, modeling, cost analysis, laboratory studies, feasibility studies, and contract documents.
- **Environmental Projects:** Experienced in Environmental Impact Assessment, sustainability and land use planning, groundwater remediation, field sampling, statistical analysis, organic compound analysis.
- **Leadership:** leading project teams to perform all types of water & wastewater works projects.
- **Communication:** good communication skills and coordinate with clients through snail, phone calls, and personally to resolve the issues, if any.

## **EDUCATION**

<b>M.S. degree in Environmental Engineering, Clarkson University, Potsdam, New York</b>	<i>December 2016</i>
<b>M.S. degree in Environmental Engineering- Land use planning &amp; Sustainability, Azad University of Tehran, Iran</b>	<i>August 2013</i>
<b>B.S. degree in Environmental Engineering, Azad University of Tehran, Iran</b>	<i>September 2011</i>

## **PROFESSIONAL EXPERIENCE**

### **Graduate Research Assistant – Bench-scale Investigation of Organic Waste Co-Digestion: Investigating Major Nutrient Fate and Energy Yield**

*Jan. 2015– Dec. 2015*

Organizations: Clarkson University, New York, USA  
Carollo Engineers, Walnut Creek, California, USA  
O'Brien & Gere, Syracuse, New York, USA

*Provided studies on compile and summarize performance, operations, and maintenance experience of full-scale co-digestion of four wastewater treatment plants facilities (Buffalo, Ithaca, Rock Creek and Waco) and communicate this information for the benefit of owners and engineers considering, planning, or designing this technology, focusing on:*

- **Laboratories Studies:**
  - Designing, assembling, and performing small-scale anaerobic digestion (AD) at 37 °C and mixed at 60 rpm (Mesophilic Condition)
  - Designing, assembling, and performing small-scale aeration tank at 20°C with the aeration rate of 14.3 liters air/ min liquid volume and rate of flow meter of 7 ml/min and the basin volume of 500 mL.
- **Experimental sampling procedures,** measuring TS, VS, COD, TKN, NH<sub>3</sub>, NO<sub>2</sub>, NO<sub>3</sub>, TP, AHRP, RP, pH.
- **Measurement:** Biogas Volume, Methane production rate, fate of major nutrient
- **Data analysis,** using statistical methods (such as linear and nonlinear regression analysis), curve fitting, numerical modeling, etc.
- **Monitoring** undergraduate students to perform water and wastewater laboratory and design projects
- **Reporting for Water Environmental Research Foundation (WERF),** Clarkson University Organization, Carollo Engineers Company, O'Brien & Gere Company, Author or Co-author for a journal publication.

### **Graduate Research Assistant – Wastewater Nutrient Removal and Recovery**

*Aug. 2013 – Current*

Organization: Clarkson University, New York, USA

*Provided studies on various aspects of wastewater and reuse, focusing on:*

- **Wastewater Modeling:** establishing, programming and evaluating:
  - A model for full-scale wastewater treatment plant unit operations and processes to predict nitrogen and phosphorous removal or recovery by secondary and advanced biological and chemical treatment processes.
- **Cost Analysis** for:
  - Net present value for phosphorous and nitrogen removal or recovery by wastewater treatment plant unit operations and processes.
- **Lifecycle Assessment (LCA) analysis**
- **Reporting** for Clarkson University organization, author or co-author for some publications.

### **Graduate Research Assistant – wastewater treatment and reuse**

*Sep. 2011- Aug. 2013*

I. Azad University, Tehran Science and Research Branch, Tehran, Iran

*Conducted experimental and theoretical investigation on the Environmental impacts of reusing wastewater treatment plant effluent of industrial states in irrigation of green space, focusing on:*

- **Wastewater Modeling:** establishing, programming and evaluating:
  - A model for full-scale wastewater treatment plant unit operations and processes to predict Environmental impacts of reusing wastewater treatment plant effluent of industrial states in irrigation of green space.
- **Laboratories studies;**
  - Designing, assembling, and performing small-scale wastewater treatment plant for treatability studies
  - Measuring Influent and Effluent characteristics of wastewater treatment plants unit operations and processes
  - Measuring cations, anions, electrical conductivity (EC), and heavy metals in soil
- **Data analysis,** using statistical methods (such as Entropy), Rapid Impact Assessment Method (RIAM)
- **Reporting** for I. Aazd University, author for a journal publication and several International conferences.

## Civil and Environmental Engineer

Feb. 2009 – Aug. 2013

Rabieh Consulting Engineers, Tehran, Iran

Progressed from an entry level civil / Environmental engineer to project engineer and project manager in four years, focusing on:

- Water and wastewater modeling and design
- Feasibility studies and Environmental Impact Assessment (EIA)
- Proposal preparation and project management

For the following projects:

- Environmental impact assessment (EIA). **Project Manager**
  - **Planned** the scope of the projects; created the schedule for completion
  - **Delivered four EIA projects** in 8 month, within budget, and with excellent level of quality
  - **Hired** technical and support staff for the projects.
  - **Managed** project staff (six people) for data collection and analyses; environmental modeling (air/noise/eutrophication/stratification); impact assessments.
- Feasibility studies of wastewater systems (collection & treatment). **Project Engineer**
  - **Coordinated** a team for **environmental, economic, social, and technical** feasibility studies of two towns (30,000 and 25,000 residents)
  - **Utilized a quantitative solution** for the social studies
  - **Designed** wastewater treatment plants
  - **Communicated** with the client and the project manager and attended meetings
  - **Reported for and presented to** the board of directors of Water & Wastewater Co.
- Surface and groundwater sampling of Garmsar plain [as a part of a groundwater contamination modeling project]. **Civil and Environmental Engineer**

## ADVANCED COMPUTER SKILLS

---

- **Development tool:** MS-Outlook, MS-Visio, MS-Project, MS-Access, MS-Word, MS-Excel, MS-PowerPoint
- **Operation systems:** Windows XP, 7; Mac OS
- **Working with different specialized packages:** MATLAB, LabVIEW, AutoCAD, GIS, RS, SPSS, SimaPro, BioWin, WaterCad, IMSDesign (RO/ NF/ UF design software), Rapid Impact Assessment Method (RIAM), Entropy, Pascal, ROSA (membrane design software).

## LABORATORY SKILLS

---

- Routine water/wastewater laboratory works
- Solid phase Extraction (SPE)
- High-performance liquid chromatography (HPLC)
- Gas chromatography (GC)
- Total Organic Carbon analyzer
- Automatic Methane Potential Test System (AMPTS)

## TRAININGS

---

- Workshop in Environmental Design and Landscape
- Workshop in HSE, ISO9001, ISO14000, OHSAS18000
- Workshop in GIS (Arc Map, Arc Catalog), Remote Sensing and Spatial Analyses

## CERTIFICATIONS

---

- Certification of Protection Scour Critical Bridges in American Council of Engineering Companies of New York
- Laboratory Safety, Hazardous Waste and Emergency Response training, Clarkson University, New York

## PROFESSIONAL AFFILIATIONS

---

- American Water Works Association (AWWA)
- Water Environmental Federation (WEF)
- American Society of Civil Engineers (ASCE)
- New York Water Environment Association (NYWEA)

## ACTIVITIES

---

- **Vice president** of Clarkson Water Works Association (student chapter of AWWA)
- **President** of Iranian Student Association of Clarkson University
- **Conference planner and student representative** from Clarkson University for New England Graduate Student Water Symposium at University of Massachusetts, Amherst campus, Fall 2015 & 2016
- **Guest lecturer** at Colorado School of Mines, Golden, CO, Spring 2014