

CHRISTOPHER D. MAXWELL-GAINES, P.E.

EXPERIENCE

Innovative Water Solutions LLC, Austin, TX
Owner / Engineer

Mar. 2004 to present

Provided leadership and direction for company • Designed rainwater collection, graywater reuse systems, irrigation systems, and drainage improvements for residential and commercial clients • Company has been responsible for the installation of over 10 million gallons of rainwater harvesting system capacity since 2004 • Designed and implemented over 700 drainage improvement projects • Performed many small business duties such as financial record-keeping, advertising, and website design/management • Provided initial client consultations and provided communication throughout entire project

City of Austin Water & Wastewater Commission, Austin, TX
Commissioner, District 8

Apr. 2023 to present

Review, analyze, and advise the City Council on the policies and resources relating to the city water and wastewater utility and water quality • Assist the City Council in ensuring that the City's residents are provided with an adequate, economical, and potable supply of water and a stable, economical, and environmentally safe system of wastewater disposal

James Miertschin & Associates, Inc., Austin, TX
Staff Engineer

Jan. 2003 to July 2008

Became lead engineer for the firm's site development projects which included a 360 unit condominium development and a 3 acre residential subdivision • Designed water treatment plant processes and improvements • Performed water treatment plant analysis for permitting purposes • Designed irrigation systems for wastewater treatment plant effluent • Supervised field sampling program of a water quality modeling projects for many different river basins in Texas • Maintained an extensive database of sampling results and river flow calculations for the project • Performed computer modeling of river basins for TMDL projects • Designed pressure sewer systems and water line projects • Assisted in the development of industrial wastewater discharge permits for various corporate entities • Organized computer and CD archive of past project files for efficient retrieval

U.S. Peace Corps, Suriname, South America
Rural Community Development Volunteer

Sept. 2000 to Nov. 2002

Learned that many small accomplishments makes a better impact than a large one • Designed a community drinking water system and acquired funds from the European Union for construction • Facilitated Project Design and Management (PDM) workshops for the community in the local language and for new Peace Corps volunteers • Developed the organizational skills of 35 community members and 4 community organizations through a PDM workshop and bimonthly meetings • Raised funds to purchase supplies and painted a 10' x 20' world map mural and 5' x 6' Suriname map mural on the school walls • Advised 20 people on developing small businesses for income generation

Texcon General Contractors, Inc., College Station, TX
Engineer-in-Training

Dec. 1999 to Sept. 2000

Designed various projects including subdivisions, roadway construction, and utility additions • Created all of the CAD files for the projects I worked on • Attended city planning and zoning meetings as company representative • Improved and standardized the structure and format of the company's CAD files • Designed the company's website (www.texcon.net)

Alexander Engineering, Inc., Spring, TX
Engineering Intern / Co-op

Alternating semesters from Aug. 1997 to May 1999

Performed project representation role at project sites • Communicated with contractors the engineers' intentions to ensure quality of construction work • Designed a number of diverse projects with Autocad Project design experience includes wastewater treatment plants, subdivision design, street and drainage design, and water distribution systems • Cataloged old CAD files from disks to CDs and created directory

CHRISTOPHER D. MAXWELL-GAINES, P.E.

EDUCATION & TRAINING

The University of Texas, Austin, TX

Aug. 2004 to May 2010

Coursework only towards a Masters of Science, Community and Regional Planning

Coursework emphasized water and natural resource planning • Curriculum provided urban design experience • Worked in teams during many class projects

U.S. Peace Corps, Suriname, South America

Sept. 2000 to Nov. 2002

Volunteer

Attended an intensive 10 week training which included living with a homestay family • Received 120 hours of conversational Aukan language training, 180 hours of development and cross-cultural training, and 16 hours of medical and safety training for tropical environments • Training sessions included Suriname's political and social history, Suriname's educational system, cultural sensitivity, development theory, community entry and analysis tools, non-formal education techniques, hands-on small-scale agricultural practices, and latrine building techniques • Attended a 4-day PDM training and learned the design and management of community projects • Facilitated the PDM workshop twice after attending it

Texas A&M University, College Station, TX

Aug. 1994 to Dec. 1999

Bachelor of Science, Civil Engineering; Engineer-in-Training

Participated during freshman and sophomore years in Engineering Education Coalitions Program sponsored by National Science Foundation that emphasized teamwork and cross-subject learning • Research project: "Comparison of Aerobic and Anaerobic Polycyclic Aromatic Hydrocarbon Degradation in Wetland Sediments" • Specialized in Environmental Discipline and coursework included: Natural Environment Systems, Natural Resource and Environmental Economics, Air Pollution Engineering, Water Resource Engineering, American Environmental History, Environmental Sociology, and Organic Chemistry
Dean's List for fall 1998 and fall 1999