# Yan Liu

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## **PROFILES**

I am an application developer with strong mathematics, statistics and analytical/logical skill and a passion for programming developer. With 4 years previous experiences in environmental engineering, 5 years of PhD-level research experiences, and 8 years of retail experiences, I has developed a mature and responsible approach to any task that I undertake, or situation that I am presented with. I am excellent in working with others to achieve a certain objective on time and with excellence. I enjoy overcoming challenges, and I have a genuine interest in database development and programming.

## SKILLS AND ABILITIES

## • Technical Skills

- Languages: C#, Java, J2EE, C++, PHP, HTML/XML, CSS, Python, R, ABAP, Fortran
- Software: Visual Studio, Eclipse, Android Studio, JetBrains, PyCharm, phpDesigner, MS Visio, MS Office
- Database: SQL, Relational Databases
- Operating System: OS X, Windows, Unix/Linux
- Solid mathematic background and data analysis skill, statistics analysis, optimization analysis and modeling, risk management
- Profound background in environmental systems management and research.

# Project Management and Research Skills

- Masters in Environmental Engineering with more than four years' experience in project management and Environmental Impact Assessment (EIA) of construction projects in China
- Familiar with the federal and provincial environmental legislation
- Organized and participated technical report and proposal writing
- Creatively incorporated a variety of technology strategies into study areas

# • Transferable Skills

- Able to take initiative and prioritize tasks
- Strong Statistics and Data analysis skills
- Strong decision making, problem solving, and analytical skills
- Keen interest in learning and personal development
- Proven ability of organizing and completing multiple tasks; able to balance competing priorities and meet tight deadlines
- Effective communication and teamwork skills; energetic and patient

## **EDUCATION EXPERIENCE**

**Diploma, Information Technology (IT)**, Nova Scotia Community College (NSCC), Halifax, Nova Scotia, Canada, expected graduation 2017

**Ph.D. Candidate (Environmental Engineering),** Faculty of Engineering and Applied Science, University of Regina, Regina, Saskatchewan, Canada, 2000 – 2005 (Complete 5 years of the 6-year program, part-time)

Master of Applied Science (Environmental Systems Engineering), Faculty of Engineering and Applied Science, University of Regina, Regina, Saskatchewan, Canada, 1998 – 2000

**Bachelor of Science (Computer Science)**, Self-Study Higher Education Examination, Tianjin, P.R. China, 1993 – 1997

Coursework: Analog and Digital Circuit, Data Structure and Algorithm, Discrete Structures, Programming Language Pascal, C++, Database Introduction, Operation System, etc.

**Bachelor of Science (Environmental Science)**, Nankai University, Tianjin, P. R. China, 1990 – 1994

#### **WORK EXPERIENCE**

May 2016 – Jun. 2016 Website Design and CRM Integration

Hospice Halifax, Halifax, Nova Scotia, Canada

- Create a web form by using PHP and WordPress;
- Learning and practicing Salesforce for NPSP (Nonprofit Start Package);
- Integrated website form with Salesforce for data tracking

Sept. 2009 – present **Convenience Store Manager** 

Newstand ETC. (Name of the Store), Halifax, Nova Scotia, Canada

- Store daily operation and management, training new employees, and custom services;
- Book-keeping for all the receipts and daily transactions;
- Maintain and keep the profit steady yearly in 10% with customer satisfaction

2000 – 2005 **Research Assistant**, PhD Candidate. Part time, Graduate Student Faculty of Engineering, University of Regina, Canada (Part time, not completed)

- Data collection, analysis, and processing for the research and projects;
- Studied optimal design of groundwater remediation systems;
- UTCHEM project Groundwater Simulation Modeling and Optimization Remediation Studied optimal design of groundwater remediation systems, where genetic-algorithm-based nonlinear mixed-integer optimization (using C++) was combined with a 3D finite difference multiphase multicomponent groundwater quality simulation model (UTCHEM, Fortran90) to determine optimal remediation strategies.

## 1998 – 2000 Research Assistant

Faculty of Engineering, University of Regina, Canada

- Established a solid background in environmental systems engineering
- Learned many kinds of uncertainty-based environmental modeling techniques
- Involved in academic researches and projects

#### 1996 – 1998 Environmental Engineer

Environmental Protection Bureau (EPB)

Tianjin Municipal Government (Under-direct jurisdiction of Central Authority), P.R.China.

- As a Project Manager, fulfilled the Environmental Impact Assessment (EIA) of the construction projects;
- Organized the reports, proposal writing and coordinated the teamwork
- Prepared, planned, organized and conducted the employee training
- Participated actively on various joint committees

# 1994 – 1996 Assistant Environmental Engineer

Environmental Protection Bureau (EPB)

Tianjin Municipal Government (Under-direct jurisdiction of Central Authority), P.R.China.

- Fulfilled Environmental Impact Assessment (EIA) of the construction projects
- Involved in reports and proposal writing
- Participated in the research works on formulating Environmental Impact Assessment Classification Screening Principle of Construction Project

# 1997 – 1998 Engineer (Information Center, Part Time)

Environmental Protection Technology Information Center, Environmental Protection Bureau (EPB) Tianjin Municipal Government (Under-direct jurisdiction of Central Authority), P.R.China.

- Participated the forming of new Information Center
- Data entry and database development
- Maintaining and servicing computers and software installation

#### **VOLUNTEER EXPERIENCE**

# **<u>2013 – Present</u>**, Volunteer in the Chinese Society of Nova Scotia

- Assisting in planning the Society's events, setting up and decorating the rooms for the Society's events (including Christmas party, Chinese New Year Banquet, Mother's Day, Nova Scotia Multicultural Festival, Annual General Meeting);
- Organizing and supervising the young kids activities when necessary

#### 1994 – 1997, Science and Math Tutor

- Tutoring Science and Math for Grade 7-12;

1994 – 1997, Caregiver (Volunteer, Weekend), Tianjin Orphanage, Tianjin, P.R. China;

- Organizing recreational activities;
- Teaching painting, drawing handicrafts and fun natural science and math;
- Assisting in caring children with a variety of problems, such as deformity

## **SCHOLARSHIPS & AWARDS**

2002 - 2004	NSERC Postgraduate Scholarship, Institutional, Research Council of Canada
1999 - 2001	Graduate Studies and Research Scholarship, Institutional, University of Regina
1998 - 2000	Research Assistantship, Institutional, University of Regina
1996	Honor of Excellent Youth, City Construction System, Tianjin
1995	3rd Prize for Scientific and Technical Paper, Tianjin EPB
1992 - 1994	Nankai University Award, Institutional, Nankai University, P. R. China

# **PUBLICATIONS**

- 1. L. Liu, G. H. Huang, **Y. Liu**, G. A. Fuller, A fuzzy-stochastic robust programming model for regional air quality management under uncertainty, Engineering Optimization, 35(2):177-199 (2003).
- 2. Waite, D.T., A.D. Snihura, **Y. Liu**, and G.H. Huang, Uptake of atmospheric mercury by deionized water and aqueous solutions of inorganic salts at acidic, neutral and alkaline pH, Chemosphere (Elsevier Science), 49(3): 341-351 (2002).
- 3. **Y. Liu** and G. H. Huang, An optimization approach for regional air quality management under uncertainty, presented at Annual Conference of the Canadian Society for Civil Engineering, Regina, Canada, June 1 –3, 1999,
- 4. **Y. Liu** and Q. Y. Liu, Acute toxicity study of toxic substances in municipal sludge from Jizhuangzhi municipal wastewater treatment in Tianjin, Urban Environment & Urban Ecology, 12(4), 24-32, 1994.

# ACADEMIC ACTIVITIES

- Attending and presenting 1 paper at the 1999 Annual Conference of the Canadian Society for Civil Engineering, June 2 5, 1999, Regina;
- Reviewing a paper submitted to Journal of Environmental Management. Paper Reference No: 1834, Referee No: 1/1116, Date Sent: 03/04/00;