

# YAN LI

Cell: 469-585-4651 Email: yan.li@tamuc.edu

---

## **EDUCATION**

<b>Ph.D. in Geospatial Information Sciences</b> University of Texas at Dallas, Richardson, TX	GPA 3.87/4.0 Dec. 2009
<b>M.S. in Geographic Information Sciences</b> University of Texas at Dallas, Richardson, TX	GPA 3.88/4.0 Aug. 2005
<b>M.S. in Computer Science</b> University of Texas at Dallas, Richardson, TX	GPA 3.86/4.0 May 2002
<b>B.S. in Computer Science</b> University of Texas at Dallas, Richardson, TX	GPA 3.73/4.0 May 2001

## **PROFESSIONAL EXPERIENCE**

**Adjunct Faculty** **Jan. 2020 – Present**

**Texas A&M University at Commerce, Computer Science Department**

- Teach courses:
  - **CSCI-340 Introduction to Database.** It covers knowledge, skills in data modeling, design and the representation of information in relational database systems, security, access.
  - **CSCI-333 Applied Data Analytics with Python.** It covers both theoretical and practical aspects of applied data science, analytics, and visualization in Python.

**Staff / Lead Application Analyst / Spatial Database Administrator** **Nov. 2011 - Present**

**Pioneer Natural Resources, Irving, TX**

- Engineering and Geo application support
- Wellview data integration customization development
- Manage GIS Spatial Databases, Enterprise ArcGIS environments.
- Developed and taught GIS courses to promote GIS: Fundamental GIS, Intermediate GIS - 3D

**Adjunct Faculty** **Aug. 2011 – Dec. 2011**

**Brookhaven College, Math and Science School GIS program**

- Taught Intermediate GIS class, which introduces the theories, applications, and business cases for Geodatabase design, implementation and cartographic representation in GIS.

**GIS Database Administrator (Senior GIS Analyst)**

**City of Dallas GIS Division, Dallas, TX**

**Apr. 2007 – Nov 2011**

- Managed enterprise SQL databases, including MS SQL and ArcSDE database design, setup, update, backup, disaster recovery, performance tuning, and security management.
- Managed GIS vector and raster data, such as: create schema; load, update, publish, and synchronize data; maintain metadata; replicate departmental data.

- Designed system and database architectures; Set up, upgrade, administer and maintain servers and systems; Install, configure, and upgrade GIS software and license managers.
- GIS customized application development and scripting to automate workflows.

### **GIS Programmer (GIS Analyst III)**

**City of Dallas GIS Division, Dallas, TX**

**Feb. 2005 – Apr. 2007**

- Developed multiple ArcGIS desktop, ArcIMS, and ArcGIS Server web applications, using C #, VB, VBA, ArcObjects, Javascript, and Python etc.

### **Research Assistant**

**Aug. 2003 – Dec. 2007**

**School of EPPS, GIS program, The University of Texas at Dallas, Richardson, TX**

- Developed Pattern Matching algorithms and implemented a system to automatically georeference a raw image onto a vector map, using C++, VBA, and ArcObjects
- Managed multiple projects, including the development of ArcGIS desktop and ArcIMS customized applications for Collin County, Rowlett City, and DART

### **Web Developer / System Administrator**

**National Financial Consultants, Dallas, TX**

**Jul. 2001 – Jul. 2004**

- Designed, published, and maintained the company’s business website.
- Administered the company’s computer network. Provided IT technical support.

## **PUBLICATIONS**

1. “An Automated System for Image-to-Vector Georeferencing”. Yan Li & Ronald Briggs. Cartography and Geographic Information Science, Volume 39, Issue 4, P199-217, 2012.
2. “Automatic Extraction of Roads from High Resolution Aerial and Satellite Images with Heavy Noise”. Yan Li and Ronald Briggs. International Conference on Geographic Information Systems (ICGIS), Jun. 2009, Paris, France, 4 pages
3. “Error Control in Automated Georeferencing”. Yan Li and Ronald Briggs. Australasian Remote Sensing & Photogrammetry Conference (ARSPC), Sep. 2008, Darwin, Australia, 10 pages.
4. “Scalable and Error Tolerant Automated Georeferencing under Affine Transformations”. Yan Li and Ronald Briggs. IEEE International Geoscience & Remote Sensing Symposium (IGARSS), Jul. 2008, Boston, MA, 4 pages.
5. “Automated Georeferencing Based on Topological Point Pattern Matching”. Yan Li and Ronald Briggs. The International Symposium on Automated Cartography (AutoCarto), June 2006, Vancouver, WA, 10 pages.

## **RESEARCH INTEREST**

Pattern Recognition. Remote Sensing Digital Image Processing. Artificial Intelligence. Machine Learning. Data Mining. Big data.