

HUANG, EIT, GISP
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OBJECTIVE

Obtain a position at a company where my ESRI ArcGIS and Microsoft programming experience and knowledge can be used effectively.

EDUCATION

- M.S. in Civil and Environmental Engineering, *Florida International University*, Miami, Florida, 1999 to 2000
- B.S. in Civil Engineering, *Beijing University of Technology*, Beijing, People's Republic of China, 1987 to 1992

SUMMARY OF EXPERIENCE

Mr. Huang has gained 10 years working experience in GIS software application and programming and more than 8 years working experience in transportation engineering. He has very strong skills in ESRI ArcGIS software and Microsoft programming languages.

PROFESSIONAL EXPERIENCE

GIS Professional/Transportation Engineering Analyst, Advanced Transportation Engineering Consultants, Miami, Florida, July 2008 – July 2010

- **SR 87 Project Development and Environment**
Worked in a three-member team. The responsibility includes using GIS software to verify the transportation model input data, using GIS geoprocessing functions to analyze the transportation model output data, and creating various maps for the project report.
- **SR 836/SR 826 Interchange Reconstruction Mobility Plan**
Worked in a two-member team. The responsibility includes using transportation demand modeling software to analyze the traffic volume distribution in the vicinity of the SR 836/SR 826 interchange before and during reconstruction, using GIS software to analyze the origins and destinations of the traffic, and visualizing the analysis results in GIS map.
- **SR 997 Traffic Sign Inventory**
Leader of the project. The responsibility includes using GIS software to do the inventory of all traffic signs in SR 997, analyzing the positions of all traffic signs to determine if they meet the standards, proposing the safety improvement plans to reduce the number of crashes along SR 997, and creating the traffic sign maps in GIS.
- **SR 5/US 1 Right of Way Needs Assessment for Monroe County**
Worked in a two-member team. The responsibility includes digitizing the right of way of highway and programmed projects into GIS shapefiles based on the data collected from Florida Department of Transportation, assessing the right of way of way needs of the programmed projects by using GIS geoprocessing functions, creating the right of way needs assessment maps in GIS, and developing some GIS applications to help complete the above mentioned tasks in an efficient manner.
- **SR 5/US 1 18-Mile Stretch Access Management Plan**
Worked in a two-member team. The responsibility includes using GIS software to identify property parcels along SR5/US 1 18-mile stretch, developing a GIS application to calculate the locations of the property parcels identified based on the mile markers of SR 5/US 1, and creating property parcels maps in GIS.
- **SR 924 Project Development and Environment**
Leader of the project. The responsibility includes identifying the property parcels affected by several alternatives of SR 924 extension project and developing a GIS application to assess the values of the portions of property parcels being affected.

Research Associate, *International Hurricane Research Center*, Florida International University, Miami, Florida, May 2000 – May 2008

- **Airborne Laser Mapping of Coastal Erosion**
Individually developed the Florida Light Detection and Ranging (LIDAR) data management system using ESRI ArcGIS Server and Microsoft Visual C#. The system served as one of the LIDAR data delivery methods which is part of the Airborne Laser Mapping of Coastal Erosion project. The system displays the LIDAR data in tiles on the Florida map. Users are able to download the data for a specific tile.
- **Miami-Dade County Aerial Photo**
Individually developed the Miami-Dade County Aerial Photo Management System using ESRI ArcIMS and JavaScript. The system was to facilitate the center's research staff to access the aerial photos. It displays Miami-Dade County aerial photo in tiles on the county map. The system also provides options for users to choose certain types of highway to be displayed. Users can download the aerial photos for a specific tile.
- **Geodatabase Design and Creation**
Individually designed and created the geodatabase for the center's projects by using the ESRI Personal Geodatabase and ESRI ArcSDE Geodatabase. Added the base map features to the geodatabase and created relationships between stored data to help the center's research staff access the map features easily. Kept the map features in the geodatabase up to date.
- **Application Developer**
Provided application development service to the center's research staff under ESRI ArcGIS Desktop, ESRI ArcGIS Server, and ESRI ArcIMS Server.
- **Data Processing**
Processed project data using ESRI ArcGIS Desktop. Managed and maintained project data using geodatabase. Deployed the project data to the centralized server, like ESRI ArcGIS Server.
- **ESRI ArcGIS Server and ArcIMS Setup and Maintenance**
Individually set up the ESRI ArcGIS Server and ArcIMS for the center's projects. Added the maps based on the center's projects to ESRI ArcGIS Server and ArcIMS per requests. Troubleshot the problems which occurred in ESRI ArcGIS Server and ArcIMS. Kept the ESRI ArcGIS Server and ArcIMS up to date by applying the latest service packs and patches.

Research Assistant, *Lehman Center for Transportation Research*, Florida International University, Miami, Florida, January 1999 – April 2000

- **Online Application of the Freeway Capacity Analysis Software**
Individually developed the online application of the freeway capacity analysis software (a significant part of Highway Capacity Software online version) using Microsoft ASP. This application enables users to perform the freeway capacity analysis online based on the Highway Capacity Manual formulas.
- **Management of Lehman Center for Transportation Research's Network, Servers and Computers**
Responsible for diagnosing, and trouble-shooting the entire center's network, servers and computers.
- **Webmaster of the Lehman Center for Transportation Research Website**
Responsible for maintaining the website by using Microsoft Frontpage.

Transportation Engineer, *Highway Research Institute of Ministry of Communications*, Beijing, People's Republic of China, July 1992 – December 1998

- **Traffic Engineering Design**
As a project manager, responsible for designing "Qixian – Linfen", "Taiyuan - Jiuguan", and "Taiyuan" Expressways. As a team member, participated in designing "Beijing Capital Airport" Expressway.
- **Software Development**
As a principal programmer, developed "Traffic Engineering CAD", which was the key project of the Eighth Five-Year Plan in China using programming language C in the X-Windows at HP workstation.

COMPUTER SKILLS

- **GIS Software:** ESRI ArcGIS Server, ArcIMS, ArcMap, and ArcCatalog
- **Design and Drafting Software:** MicroStation, AutoCAD
- **Programming Language:** Microsoft Visual C#, Microsoft ASP.NET, Microsoft VB.NET, XML, SQL, Macro Assembler, Fortran
- **Operating Systems:** Windows Vista, Windows Server 2003, Windows Sever 2000, Windows XP
- **Application Software:** Microsoft Office, Adobe Dreamweaver, Adobe Photoshop

CERTIFICATION

- Certified Geographic Information Systems Professional (No. 00060782) in United States, November, 2008
- Engineering Intern (No. 1100006767) in the State of Florida, July, 2001
- Training of National Highway Surveillance and Design, hosted by Ministry of Communications, PRC, Chengdu, China, January, 1998
- Training of HP UNIX Workstation, Shanghai, China, July, 1993

PUBLICATION

- Lixin Huang, *SR 5/Overseas Highway ROW Needs Assessment*, Presented at ESRI International User Conference (UC), July, 2010
- Lixin Huang, *SR 5/Overseas Highway ROW Needs Assessment*, Presented at ESRI Survey and Engineering (SEG) Summit, July, 2010
- Lixin Huang, *Using GIS to Analyze People's Behaviors in Hurricane Evacuation*, Presented at ESRI Southeast Regional User Group (SERUG) Conference, April, 2009

AFFILIATION

- Urban and Regional Information Systems Association
- Institute of Transportation Engineers
- Member of GIS Committee in FSUTMS Model Task Force

AWARDS

- 1999 to 2000 Graduate Assistantship from Florida International University, Miami, Florida
- 1997, First Prize of Excellent Traffic Engineering Design for "*Taiyuan—Jiuguan*" Expressway from Construction Committee of Shanxi Province, China
- 1995, Second Prize of Technology Progress for *Traffic Engineering CAD* from Highway Research Institute of Ministry of Communications, China

REFERENCES

Available upon request