

SENTHIL THYAGARAJAN

Dallas, TX

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## **SUMMARY**

Geographical Information Systems professional with 7 years of experience in

- Developing tools for geospatial analysis using JavaScript.
- Designing and implementing UI for mapping applications using HTML and CSS.
- Building models to automate geospatial workflows.

## **TECHNICAL SKILLS**

### **Programming**

- R, D3JS, JavaScript, Python, Oracle Map Viewer API, PL/SQL

### **Data Analysis**

- Data cleaning and Exploration, Data Scrapping using API's and webpages, Feature Extraction, Developing predictive models, Geocoding, Data visualization

**Data Analysis Tools** - Tableau, Alteryx, MS Excel, Power BI

### **Web Design**

- HTML, CSS, Bootstrap

### **GIS Tools**

- ArcGIS Desktop (9.x/10.x), ArcGIS Server (9.x/10.x), ArcGIS Business Analyst (10.x), ArcIMS, QGIS, Map Server, ERDAS Imagine, Google Earth, MapInfo, Mapitude

## **EDUCATION**

### **UNIVERSITY OF TEXAS, DALLAS - May 2014**

Master of Science - Geospatial Information Science

### **SYMBIOSIS INSTITUTE OF GEOINFORMATICS, Pune, India - May 2007**

Post Graduate Diploma in Geoinformatics

### **ANNA UNIVERSITY, Chennai, India - May 2005**

Bachelor of Engineering - Electronics and Instrumentation Engineering

## **PROFESSIONAL EXPERIENCE**

### **GIS Developer , Tango Analytics - Irving, TX**

- July 2014 - Present

- Developed tools for web based mapping application to perform analysis such as viewing and editing geometries, generate spider maps and customer spotting.
- Built UI for a web application to make it responsive across various platforms.
- Configured geospatial mapping applications for clients which helped to view their existing stores, potential sites for new stores and their market competitors.
- Implemented PL/SQL procedures for generating demographic reports, trade areas, sales forecast model and geospatial editing functionalities.
- Utilized Alteryx for building models, GIS data conversion, data manipulation and geocoding.
- Provided support for bug fixes or enhancements in existing web mapping applications.
- Created GIS dataset for retail competitor location from different sources.

### **Senior Developer, High Mark Credit Information Services Ltd - Mumbai, India**

- Feb 2012 - Aug 2012

- Designed and implemented zip code proximity mapping workflow using QGIS to improve the accuracy and usability of Indian addresses for the purpose of identity resolution.
- Delivered projects combining underlying bank data with GIS for premier banking clients.
- Set up and mentored a GIS team for R&D.

### **Senior GIS Analyst, Cybertech Systems and Software, Ltd – Mumbai, India**

**– Jun 2010 - Feb 2012**

- Provided technical support for ESRI Suite of products.
- Created GIS resources with ArcGIS Desktop that can be hosted as a GIS Service in ArcGIS Server.
- Implemented desktop and web based GIS solutions for ESRI's clients.

### **GIS Specialist, Environmental Management Centre – Mumbai, India**

**– Sep 2008 - May 2010**

- Developed a GIS Web Based Project Information Management system for an Infrastructure Development firm with ArcGIS Server.
- Converted CAD data to GIS data, geodatabase creation from spatial and non-spatial data, spatial and attribute editing, digitizing and implement a fully functional ArcGIS Server setup.
- Created maps for a pollution control board for the polluted stretches of a river across a state to devise the environmental status report.

### **GIS Engineer, ESRI India Ltd – Mumbai, India**

**– Jan 2007 - Sep 2008**

- Trained key clients to ensure understanding for ArcGIS Desktop and ArcGIS Server.
- Represented ESRI India as ArcGIS Server product specialist at ESRI India User conference.
- Implemented a web based GIS application for a banking and financial institution using ArcGIS Server.
- Initiated the pilot projects for the Maharashtra pollution control board for preparing the Zoning Atlas.

### **ANALYTICS PROJECTS**

- **NFL Season 2016-2017:** Mapped how the teams fared in NFL for season 2016-2017 by creating spider map on their opponents and their wins using D3.js.
- **Where do people eat in Austin?** Scrapped data from Foursquare API for all places falling under the food & restaurant category using R. After cleaning the scrapped data in R, used D3.js to create bubble chart based on the inputs, check-ins and ratings.
- **Top 250 Beers in 2016:** Scrapped data using R from Beer Advocate website to get top 250 beers in 2016, used ggmap library to geocode and then plotted on a map by using the leaflet library.

### **GIS PROJECTS**

- Mapped Energy Consumption for University of Texas at Dallas and represented it using ArcGIS Server and Flex Viewer.
- Developed a tool for ArcGIS Desktop using python to convert all the latitude longitude from the multiple sheets in an excel file to a single point feature class.
- Build a 3 D model for the University of Texas at Dallas campus using Arc Scene along with the floor wise information for all the buildings inside the campus.