

Ruben Fernandez is a data scientist with more than 15 years of experience in the professional services industry. He and his team have participated in more than 50 projects for private, public and governmental organizations. He holds a Bachelors Degree on Economics by the Universidad de las Americas, Puebla and a Master of Scinces on Public Policy and management by Carnegie Mellon University. He has been a consultant at the World Bank, The Inter-american Development Bank, Deloitte, The Government of Victoria, Australia, among others.

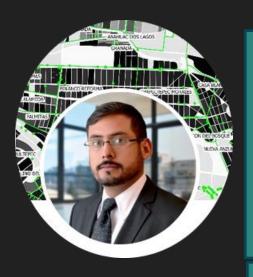
# **Data Science**

#### Services

- On demand algorithmic program design
- Cost-benfit analysis for public and private investments
- Location analysis and selection for industrialand commercial operation
- Market size estimation for commercial and services operations
- Parametric estimation of populations, economic and social features for delimited areas
- Real estate classification based on features and location
- Forecasting of price, and quantities demanded and offered

## Private Prjects

- Development of a methodology to help States compare Remote Sensing technology for forest monitoring
- Estimation of market size and spending for Mall development
- Market analysis for a micro lending bank
- Market intelligence report to inform an Asian Investment Fund on possible projects in Mexico
- Classification of 850 properties to form an investment portfolio
- Location analysis and selection for a manufacturing operation in Northern Mexico
- Determination of the best and most profitable location for a Retail company
- Development of a methodology to estimate pedestrian traffic nodes in Mexico City
- Development of and algorithm to classify household spending over the geographic space



## Methodologies

- Multivariate Analysis
- Multiple Imputation
- Cluster Analysis
- Econometric Models
- Parametric Estimation
- Forecastino
- Machine Learning
- Web Scrapping
- Text Mining
- Bayesian Methods
- Geographic Information Analysis

### **Government Projects**

- Cost-benefit analysis to determine the purchase of vaccines against AH1N1 virus by the Mexican, Brazilian, Argentinian and Nicaraguan governments
- Focalization analysis for a school improvement program in Mexico
- Cost benefit analysis for the construction of a home port in Puerto Peñasco, Sonora
- Cost-benefit analysis for a beach front development in San Fernando, Trinidad & Tobago
- A traffic analysis of a Mexico city sector to estimate the demand for a Multimodal Transfer Center

#### Clients & Stakeholders:

EIT - Climate KIC, Financiera Compartamos, Grupo Modelo, Inveb Group, Grupo Abilia, Smart & Final, United Nations Development Program, International Organizations for Migrations, United Nations High Commisioner for Refugees, Kampala Capital City Authority, Secretaria de Hacienda y Crédito Público, Secretaria de Educacion Publica, Secretaria de la Función Pública, Nacional Financiera, Partido Acción Nacional, Bansefi, The South Pole Group, Mexicanos Primero, Regional Development South Australia, Origen Solar, KIA Motors, Avuntamiento de Puebla, Secretaria de Desarrollo Social, Secretaría del Trabajo y Previsión Social, Gobernment of Tinidad & Tobago, Gobernment of the Netherlans, Descifra Mercados, Iglesia de los Santos de los Últimos Días, , Open Street Maps, Cinemex, The European Union, Airbus Space.