

# Eduardo Blancas Reyes

edu.blancas@gmail.com

edublancas.github.io

## Education

### Columbia University

M.S. in Data Science

Starting in Fall 2017

### Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM)

B.S. in Mechatronics Engineering. Graduated with honors.

January 2011 - May 2015

Coursework in analog and digital electronics, instrumentation, control theory, embedded systems.

## Additional coursework

### Universidad Nacional Autónoma de México (UNAM)

Graduate Certificate in Applied Statistics

Graduate level coursework on inference, sampling, multivariate analysis, experimental design, categorical data analysis, regression models and bayesian statistics.

August 2016 - June 2017

## Professional Experience

### Krieger. Mexico City.

*Lead Backend Engineer*

June 2016 - Present

- Oversaw backend development across projects to ensure code quality, performance and reliability
- Developed internal software tools that are used in several ongoing projects (input validation, software versioning, deployment, user permissions). These tools have reduced development time and increased team's productivity
- Wrote development guidelines to provide a starting point for new projects (code testing, system design, coding style)
- Built an automated data pipeline to periodically perform record matching in four insurance company's catalogs. Deployment in Google Cloud using Python and Apache Airflow
- REST Web Services development using Python and Google Cloud

### Center for Data Science and Public Policy (University of Chicago). Chicago, IL.

*Data Science Fellow*

May 2015 - June 2016

- Built data pipelines using Python, PostgreSQL, PostGIS and Docker
- Designed a predictive model for Infonavit (largest mortgage provider in Mexico) to predict home abandonment. Worked with more than 100GB of data
- Developed a Machine Learning model using spatiotemporal data for the City of Cincinnati to identify properties at risk of building code violations. Worked with more than 50GB of data

### Fritime. Mexico City.

*CTO and co-founder*

January 2014 - May 2015

- Led a technical 3-person team
- Engineered the iOS app prototype for our seed investment round
- Programmed web services for our iOS app

- Developed several 'civic apps' for iOS to provide easy access to legal regulations (e.g. traffic law) to prevent corruption

## Publications

- K. Ackermann, **E. Blancas Reyes**, S. He, T. Anderson Keller, P. van der Boor, R. Khan, R. Ghani. Designing Policy Recommendations to Reduce Home Abandonment in Mexico. In Proceedings of the 22nd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, KDD '16.
- **E. Blancas Reyes**, J. Helsby, K. Rasch, P. van der Boor, L. Haynes, R. Ghani, E. Cunningham. Early detection of properties at risk of blight using spatiotemporal data. Data for Policy 2016 at University of Cambridge.

## Volunteering/Open Source

**sklearn-evaluation.** June 2016-Present

- Developed a Python package to evaluate Machine Learning models

**Stanford Scholar Initiative.** May 2016

- Volunteered for two weeks to design the **Practical Machine Learning with Python** course
- Designed sections of the syllabus and provided code examples using scikit-learn and pandas

## Awards

- 2017 – National Council of Science and Technology scholarship recipient
- 2016 – Fulbright-García Robles scholarship recipient
- 2011-2015 – *Academic talent* scholarship for undergraduate studies at Tecnológico de Monterrey
- 2015 – CENEVAL National Performance Excellence Award
- 2014 – Reto GobMX - Obtained a contract with the Federal Government of Mexico through an open competition
- 2014 – 1st Place in HackDF (Mexico City's Government)
- 2013 – Honoric Mention 3rd Prize to Innovation in Transparency (World Bank, INAI)
- 2011 – Honoric Mention in *App 115* Challenge (Mexico's Chamber of Deputies)
- 2011 – Physics and Mathematics Honors Program at Tecnológico de Monterrey

## Skills

- **Python** (Advanced)
  - Extensive use of the standard library. Experience doing ETL, Machine Learning (scikit-learn), visualization (matplotlib), data cleaning (pandas, numpy) and web development (flask, jinja)
- **R** (Advanced)
  - Statistical modelling with R
- **Google Cloud** (Advanced)
  - App Engine (PaaS), Cloud SQL, Cloud Storage and Cloud Datastore (NoSQL DB)
- **Objective-C** (Advanced)
  - iOS App development
- **UNIX** (Intermediate)
  - Experience with UNIX-based Operating Systems and the command line (bash and zsh)
- **SQL (PostgreSQL)** (Intermediate)
  - Database design and data manipulation, some experience with PostGIS
- Other skills (Basic):
  - C, Matlab, Java, Docker, MongoDB, Apache Spark, Amazon EC2, Frontend web development (HTML, CSS, Javascript)