Eduardo Blancas Reyes

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Education

Columbia University Aug 2017 - Dec 2018 (Expected)
M.S. in Data Science
Relevant coursework: Algorithms for Data Science, Computer Systems for Data Science, Exploratory Data Analysis & Visualization, Machine Learning, Probabilistic Programming, Deep Learning & Neuroscience

Universidad Nacional Autónoma de México (UNAM) Aug 2016 - Jun 2017
Graduate Certificate in Applied Statistics
Relevant coursework: Statistical Inference, Sampling Techniques, Multivariate Analysis, Experimental Design, Categorical Data Analysis, Regression Models and Bayesian Inference.

Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM) Jan 2011 - May 2015
B.S. in Mechatronics Engineering. Graduated with honors.
Coursework in analog and digital electronics, instrumentation, control theory, embedded systems.

Experience

Columbia University (Grossman Center for the Statistics of Mind) New York, NY
Research Assistant (Advisor: Liam Paninski) Sep 2017 - Present

- Maintainer of YASS: an open source spike sorting library built on top of NumPy, SciPy, scikit-learn and TensorFlow. Responsible for managing the project with the internal team and external community
- Develop high-performance algorithms for processing Larger-than-Memory datasets
- Apply Machine Learning and Statistical methods to process neural recordings

Krieger Mexico City, MX
Lead Backend Engineer Jun 2016 - Aug 2017

- 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
- REST Web Services development using Python and Google Cloud

University of Chicago (Center for Data Science and Public Policy) Chicago, IL
Data Science Fellow (Advisor: Rayid Ghani) May 2015 - Jun 2016

- Held meetings with project partners for scoping and updates, communicated data analysis results to non-technical audience
- Developed a Machine Learning model using spatiotemporal data for the City of Cincinnati to identify properties at risk of building code violations. Engineering an automated and reproducible pipeline to ingest new data and update the model. Worked with more than 50GB of data.
- Designed a predictive model for Infonavit (largest mortgage provider in Mexico) to predict home abandonment. Worked with more than 100GB of data

Fritime Mexico City, MX
CTO and co-founder Jan 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

Independent Mobile App Developer Mexico City, MX
Jun 2011 - Jan 2014

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

Publications

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.

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.

Skills

Programming languages: Python, R, Objective-C, SQL. **Tools and technologies**: scikit-learn, numpy, flask, Google App Engine, Google Cloud Datastore, Google Cloud Storage, PostgreSQL, PostGIS, Docker, MongoDB, Amazon EC2, Amazon S3, Amazon Beanstalk

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 – Honorific Mention 3rd Prize to Innovation in Transparency (World Bank, INAI)
- 2011 – Honorific Mention in *App 115* Challenge (Mexico's Chamber of Deputies)
- 2011 – Physics and Mathematics Honors Program at Tecnológico de Monterrey

Press

- Eduardo Blancas (IMT'15) sobresale en Data Science for Social Good. *Tecnológico de Monterrey*. September, 2015.
- Infonavit Project: Reducing Home Abandonment. *DSSG blog*. August, 2015.
- 2015 Fellow Profiles: Eduardo Blancas Reyes & Eugenia Giraudy. *DSSG blog*. May, 2015.
- ¿No sabes cuándo circula tu auto? Revisa estas 'apps'. *CNN México*. August, 2014.
- #HACKDF: Festival de datos en Ciudad de México. *La Nación*. February, 2014.
- HackDF convoca a la ciudadanía a utilizar los datos que las secretarías del GDF generan y recaban con el objetivo de ideas y desarrollar aplicaciones que mejoren la vida en la ciudad. LabCDMX. February, 2014.
- Una nueva versión de ciudadanía está disponible, ¿desea actualizar?. *TEDx ITESM CCM*. July, 2014.
- Interview in ForoTV (Spanish). *Televisa ForoTV*. February, 2014.
- Premian app utilitaria. *Reforma Newspaper*. January, 2014.
- Los piratas cívicos encuentran el botín de los datos mexicanos. *Yorokobu*. January, 2014.
- Jurado elige a los ganadores de la 3ª edición del premio a la innovación en transparencia para la mejora de la gestión institucional. *World Bank*. August, 2013.
- Le ahorran alumnos del Tec de Monterrey al Gobierno Federal 115 MDP. *Tecnológico de Monterrey*. June, 2013.
- Premia Cámara baja nueva app... gratuita. *Reforma Newspaper*. April, 2013.
- Bringing Down The Mexican Tech Mafia: How Hackers Stopped A $9.3 Million Fraud. *TechCrunch*. April, 2013.
- 115 millones por una aplicación o la necesidad de servicios web útiles en México. *Gizmodo en español*. March, 2013.

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