Eduardo Blancas Reyes

Software engineer with strong Machine Learning background and experience contributing to open source projects.

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Education

Columbia University   Aug 2017 - Dec 2018 (Expected)
M.S. in Data Science
Coursework: Computer Systems, Machine Learning, Probabilistic Programming, Robustness and Security in ML, Applied Deep Learning.

Universidad Nacional Autónoma de México (UNAM)   Aug 2016 - Jun 2017
Graduate Certificate in Applied Statistics
Coursework: Statistical Inference, Sampling, Multivariate 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.

Experience

Columbia University (Deparment of Statistics)   New York, NY
Research Assistant (Advisor: Liam Paninski)   Sep 2017 - Dec 2018

- Maintainer of YASS: an open source library for Computational Neuroscience
- Worked with the research team to turn YASS old codebase into a tested, organized and documented Python library
- Develop high-performance algorithms for processing Larger-than-Memory datasets (NumPy, SciPy, scikit-learn)
- Use Deep Learning for neural activity detection and classification (TensorFlow, Keras), models trained using Google Compute Engine

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
- Developed web services using Python (Flask) and deployed them using Google App Engine, Cloud Datastore and Cloud Storage

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

- 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.
- Designed a predictive model for Infonavit (largest mortgage provider in Mexico) to predict home abandonment. Worked with more than 100GB of data
- Both pipelines were developed using Amazon EC2 and RDS
- Communicated data analysis results to non-technical audience

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, Google Compute Engine, PostgreSQL, PostGIS, Docker, MongoDB, Amazon EC2, Amazon S3, Amazon Beanstalk

CV with prior experience, awards, press and other projects available at https://blancas.io/files/cv.pdf.