

Melissa Flores

PROFESSIONAL EXPERIENCE

RepRisk, Client Solutions Team – *Product Intern*; Zurich, Switzerland

8/2021 – 11/2021

- Mapped sustainable finance standards to new feature requirements and communicated them to engineering teams.
- Interviewed clients, created/iterated mock-ups in Excel, and collected feedback to understand pain points from users.
- Worked with sales, marketing, and legal departments to coordinate release of new tool for financial disclosures.

Woods Hole Research Center, Risk Group – *Research Assistant*; Falmouth, MA

1/2018 – 6/2019

- Built pipelines for parallel processing of TBs of geospatial data and created climate risk indices for financial managers.
- Led move from HPC cluster to cloud computing for project, managed user permissions, and created virtual machines.
- Wrote job advertisements, evaluated applications, interviewed candidates, and trained 2 new research assistants.

University of Chicago Urban Labs, Energy and Environment Lab – *Data Science Intern*; Chicago, IL

5/2017 – 7/2017

- Developed data quality checks in Stata for randomized controlled trials to identify enumerators that need retraining.
- Produced 2 communications products for potential project funders using stories and gap theory of curiosity.

World Resources Institute, Climate Program – *Climate Modeling Intern*; Washington, D.C.

8/2016 – 12/2016

- Collected and normalized GHG data to compare integrated assessment models and developed policy use cases.
- Contributed to reports and recommended changes to text and visualizations to improve clarity of technical paper.

Singapore-ETH Centre, Future Cities Laboratory – *Data Science Intern*; Singapore

6/2016 – 7/2016

- Developed real-time data visualizations for a building concept to increase urban density and energy efficiency.
- Queried time-series database to identify the most accurate sensors for measuring energy use and identify errors.

BIG RED DOG Engineering and Consulting – *Mechanical Engineering Intern*; Austin, TX

5/2014 – 8/2014

- Created energy models for LEED certified residential buildings and reviewed designs for code compliance.

SKILLS

Programming Languages: Python (pandas, scikit-learn), R (ggplot, dplyr, knitr, shiny, gdal), Stata, PostgreSQL, MySQL, SAS

Tools: Excel, Tableau, Google Cloud Platform, Access, Java D3, Google Earth Engine, QGIS, Git, Confluence

Machine Learning: NLP, Classification, Regression

Spoken languages: English (native), Spanish (fluent), German (basic knowledge)

PROJECTS

Data Science 4 All / Women, Correlation One – *Data Science Fellow*

9/2021 – 10/2021

- One of less than five percent of applicants admitted to seven-week technical training program.
- Led team of data analyst, data scientists, and data visualization students to predict flight delays in four weeks.

Marketing Analytics, ETH Zurich – *Mobiliar Insurance Group Project*

3/2021 – 5/2021

- Applied CRISP-DM to predict customer churn on real company data with 93% hit ratio, the highest in the course.
- Presented findings and made recommendations on increasing customer retention and revenue to company.

ETH Zurich, Energy and Technology Policy Group – *Master's Thesis Student*; Zurich, Switzerland

4/2020 – 2/2021

- Analyzed millions of legal text entries by developing rule-based NLP approaches with 74% classifier accuracy.
- Demonstrated that state laws push localities to adopt stricter energy codes and most places do not codify solar laws.
- Defended thesis to jury of 2 professors (in Energy Policy and Law & Big Data groups) and audience of ~20 researchers.

EDUCATION

ETH Zurich

MSc, Environmental Systems and Policy (Minor in Energy)

Spring 2021

The University of Texas at Austin

BA, Urban Studies (Minor in Math, Computer Science)

Fall 2017

The Archer Center

Bill Archer Fellowship, Policymaking and Advocacy in D.C.

Fall 2016

National University of Singapore

University-wide Exchange with Asia's top university

Spring 2017