GIOVANNI COLITTI

💼 EXPERIENCE

Current | 2020

Business Intelligence Analyst
Fieldin 📍 Remote
- Developed Shiny apps to extract / summarize data, explore data through interactive maps, and create PowerPoint presentations.
- Predicted machine unloading events with 90% accuracy.
- Designed flexible visualizations and tables of customer KPIs.
- Built a framework for estimating customer costs.
- Improved standardization, reproducibility, and audibility of all information by carefully defining metric conversions & formatting.
- Used Docker and ShinyProxy to publish applications and reports.
- Managed database tables using R and SQL.

2020 | 2018

Jr. Data Scientist
Grimmway 📍 Bakersfield, CA
- Trained ML models in R to forecast important business metrics including sales and yield; forecasts improved predictive accuracy by 30-50% over previous methods.
- Implemented linear programming problems in R to optimize planting and harvesting activities.
- Performed complex data cleaning and exploration on large datasets.
- Analyzed field trial data in R using appropriate statistical methods.
- Developed two R packages for cross-validation of time-series data with irregular time slices (tidyroll), and to interface with the CoAgMET weather network API (coagmetr).
- Created Shiny apps to visualize forecasts, implement constrained optimization problems, and generate automated reports.
- Performed sample size calculations and provided spatial sampling recommendations.
- Communicated analytical methods and results to the executive team.

2015 | 2016

Data Analyst Intern
Small Business Development Center 📍 Camarillo, CA
- Analyzed small business metrics, such as revenue per employee, to predict which clients have the highest risk of bankruptcy.
- Used model predictions to efficiently allocate limited consulting resources to assist at-risk businesses.
- Trained executive team in statistical methods.

2014

Research Assistant
California State Univeristy, Channel Islands 📍 Camarillo, CA
- Collected and cleaned data from various online sources using Stata programming.
- Created visualizations in Stata and wrote literature reviews of scientific articles related to Chinese & Indian stock, currency, and debt markets.

CONTACT INFO

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SKILLS

Analytical Methods: regression, classification, clustering, feature engineering, linear programming and optimization methods, causal analysis, Bayesian and Monte Carlo methods

Coding: R (shiny, data.table, dplyr, ggplot, plotly, rmarkdown, leaflet, tidymodels, fable, brms, lpSolve, purrr, devtools), Stata, SQL, Git, Docker

Languages: English, Chinese

COURSEWORK

R Programming (I/II)
Ecological Data Analysis in R
Quantitative Business Science
Econometrics (I/II)
Financial Econometrics
Web Applications in R with Shiny
Quantitative Methods
Applied Microeconomics
Advanced Macroeconomics

🎓 EDUCATION

2018 ● **National Taiwan University**
M.S. in Agricultural Economics (4.0 GPA) 📍 Taipei, Taiwan

2016 ● **California State University, Channel Islands**
B.A. in Economics (3.8 GPA) 📍 Camarillo, CA

📄 SELECTED RESEARCH

2018 ● **Do Concealed Firearms Decrease Crime? An Analysis Using Active Concealed Firearm License Data in the United States**
Used a unique dataset on county-level concealed firearms permits and applied two-stage least squares estimation to show that concealed firearms do not decrease crime.
DOI: http://dx.doi.org/10.6342/NTU201800993

2018 ● **Do HEVs Cause More Cyclist & Pedestrian Injuries?**
Used logit model & large UK accident-level dataset to show that quieter electric vehicles significantly increase pedestrian accidents net of other covariates including speed limit and urbanization. Also used Bayesian methods (MCMC) to estimate the posterior distribution and check for non-normality in estimates.

2018 ● **Effect of Hurricane Morakot on Agricultural Prices in Taiwan**
Used a difference-in-differences (DiD) event study model and a large transaction-level dataset to quantify the casual effect of Hurricane Morakot on vegetable prices in Taiwan, adding weight to the literature that claims weather is oftentimes the most important driver of local agricultural prices.

🏆 ACADEMIC HONORS AND AWARDS

2018 ● **Thesis Competition First Place Prize**
Master's thesis presentation competition first place winner.

2016 ● **Taiwan Ministry of Education Scholarship**
Merit scholarship for post-graduate studies in Taiwan.

2016 ● **Program Honors in Ecnomomics**
Selected by CSUCI Economics Department faculty for outstanding achievement.

2014 ● **Wang Family Scholarship**
Merit scholarship for international study in Taiwan & Mainland China.

2012 ● **President's Scholarship**
Highest scholastic achievement award in CSU system; only handful awarded annually.