Tyler Brown

510. 610. 4779 - TJB510@gmail.com

Website: https://sites.google.com/view/tyler-j-brown/home *Github*: https://github.com/tjb510/tjb510.github.io



Scan for my website!

EDUCATION

California Polytechnic University, San Luis Obispo

M.S. in Quantitative Economics

San Luis Obispo, CA

Graduating June 2025

- Demonstrating proficiency in coursework that emphasizes integrating econometrics and machine learning with structured thinking about empirical problems and incentives.
- Serve as a liaison for current MSQE students, alumni and prospective MSQE students, as student ambassador.
- Aid economics professor Jon James in administering, proctoring, and grading exams for undergraduate classes.

California Polytechnic University, San Luis Obispo

B.S. in Economics, Minor in Statistics

San Luis Obispo, CA Graduated June 2023

- Graduated Cum Laude with a 3.52 GPA.
- Concentrated in Quantitative Analysis. Excelled in coursework with a focus on to data analytics, statistical computing and modeling, machine learning, mixed and multilevel models, and econometrics.

DATA ANALYTICS PROJECTS

• Senior Thesis

- o Completed research exploring the causal connection between obesity-related cancers and healthcare costs.
- Compiled and cleaned statistical data for a literature review and used R to create a unified dataset.
- o Shared conclusive results in a formal presentation discussing the findings and limitations of my research.

• Economic Growth Model Analysis

- Conducted a regression analysis to thoroughly explore the relationship between patent activity and GDP across various countries, providing empirical evidence to Paul Romer's endogenous growth theory.
- Leveraged R for comprehensive statistical analysis, data visualization, and economic forecasting.

TECHNICAL SKILLS

- R/Rstudio (dplyr, Tidyverse), Python (Pandas, numpy), SQL, Stata, Excel, Microsoft Suite, Google Suite.
- Proficiency in machine learning models, linear regression, binary classification methods, fixed and random effects models, as well as parametric and non-parametric models for robust data analysis and forecasting.

EXPERIENCE

Industry Analyst - The Backcountry

Truckee, CA. Dec 2023 – Aug 2024

- Extracted and pre-processed 5 years of shop sales data for comprehensive product analysis and visualization.
- Utilized R software to determine the statistical effect of the pandemic on bike sales, service, and accessories, to compile practical solutions for areas with subpar post-pandemic sales.
- Developed three different time-series models of varying complexity to forecast bike sales for the 2024 summer season to aid in adapting pre-season purchases to current industry volume.
- Consulted shop owner and managers for input as to where to further focus internal analysis.

Shop Technician - The Backcountry

Truckee, CA. Dec 2020 – Current

- Responsible for managing and completing the repairs of bikes from sourcing components to their installation.
- Managed and maintained a fleet of 50+ rental E-MTBs and full-suspension bikes for optimal performance.
- Enhanced shop efficiency by implementing Litespeed during the 2023 winter season to streamline ski service.
- Entered new and incoming service parts into Litespeed to support effective stock management.
- Performed high quality and advanced service on skis including mounts, remounts, full tunes, and skin trims.

VOLUNTEER EXPERIENCE

Course Instructor and Patroller - Tahoe Backcountry Ski Patrol

Oct 2020 - Current

- Conduct yearly training on CPR skills and certify 30+ patrollers skills under Red Cross responder standards.
- Certified instructor of low-angle rope rescue procedures in yearly TBSP led mountain travel and rescue course.
- Oversee reimbursement approvals, maintain accurate financial records, and manage disbursements for the Patrol Board as Finance Officer.