JOSIAH KENNETH IVAN MCMILLAN

971-250-1195 • *josiah.mcmillan2@gmail.com*

Education

KU Leuven *2023*
MSc Statistics and Data Science

University of Washington *2019*
BSc Economics, Minor in Mathematics

Skills

Languages	SQL, R, Python (Scikit-learn, Numpy, Pandas, Matplotlib)
Software & Tools	Excel, Neo4j, Git, LaTeX, MySQL

Relevant Experience

DaBella Exteriors July 2019 - August 2020
Marketing Data Analyst *Hillsboro, Oregon*

- Reduced excess spend by an estimated **$250,000** annually by on-boarding new software vendors to provide TCPA compliance and screen out duplicate prospects
- Optimized canvasser deployment increasing leads by **5%** using **cluster analysis** and **predictive modeling**
- Ran and A/B tested email campaigns to previous customers using Mailchimp and Zapier, leading to **10% increase** in customer referrals

Projects

An Alternative to the Conway-Maxwell Poisson Model
Master Thesis

- Developed an alternative model that exhibited robustness in handling both underdispersion and overdispersion, outperforming traditional Poisson models on simulated and real data.
- Implemented a gradient-based optimization scheme to estimate model parameters, using **Maximum Likelihood Estimation** and the **optim** package in R.

Meta Analysis of Peer Effects and Student Achievement
Term Paper: Meta Analysis

- Conducted comprehensive literature review to aggregate data on Peer Effects, synthesized effect sizes from multiple studies, assessed study heterogeneity I^2 statistics, and implemented random effects models through a detailed literature search.
- Identified a small statistically-significant positive peer effect using both Frequentist and Bayesian random effects models.

Other Experience

DaBella Exteriors July 2017 - September 2017
Sales Representative *Tigard, Oregon*

- Demonstrated a **30% closing rate** on sales presentations, showing strong technical communication skills and the ability to build trust and value with stakeholders.
- Sold new roofs to customers with a total one-month best of over **$100,000** of product sold
- Assisted customers in successfully navigating financing applications for contracts averaging **$21,500** each, effectively translating financial intricacies to non-technical stakeholders.