Joseph Despres

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EDUCATION

Master of Science in Applied Statistics, Michigan State University April 2022

Coursework: Statistical Methods, Statistical Computation, Probability Theory, Industrial Mathematics, Stochastic Processes, Timeseries Econometrics and Machine Learning.

GPA: 3.66

Bachelor of Science in Economics, Minor in Mathematics, Grand Valley State University April 2020

Coursework: Econometrics, Linear Algebra, Multivariable Calculus and Statistical Computation

GPA: 3.92 *Magna Cum Laude*

Associates of Arts, Grand Rapids Community College April 2018

GPA: 3.86 *Delta Pi Alpha* (top 5%)

RESEARCH

Honors Economics Seminar January – April 2020

Grand Valley State University, Allendale, MI

- Preprocessed and analyzed proprietary point of sale data. Wrote functions in R to implement forecasting methods, derived tests and compared model performance.

Econometric Independent Study and Research April – August 2019

Grand Valley State University, Allendale, MI

- Reviewed current literature on statistical demography and population aging's impact on the labor market. Used R to combine and preprocess publicly available data sets. Used statistical and econometric methods to test the claim that wages increase with the median age in a county until the median age reaches approximately age 38.

EXPERIENCE

Data Science Intern April – August 2021

DRiV, Southfield, MI

- Used General Linear Models and Mixed Models on point-of-sale data to recommend new products to launch, wrote algorithms to identify inflection points in a product's lifecycle, pinpointed irregular purchasing patterns, quantified consumer responses to weather, economic conditions, and other exogenous factors.
- Automated a data collection and preprocessing pipeline with Databricks that generated and stored human-friendly monthly Excel reports.
- Used machine learning methods in conjunction with statistical forecasting to automate model selection and generate forecasts for over 6,800 SKUs.
- Wrote statistical reports, presented conclusions, and collaborated with stakeholders from different departments.

Steel Slitter set-up November 2016 – August 2017

Magic Steel, Wyoming, MI

- Set tooling on a steel slitter that unwound and cut steel coils. Maintained an error tolerance $\pm\ 0.004$"

Package Handler November 2015 – November 2016

FedEx Ground, Walker, MI

- Worked in teams up to five to move oversize overweight packages.

SKILLS

- General Linear Models, Mixed Models, Monte Carlo Methods, Machine Learning and Forecasting
- Data preprocessing, analysis, programming and data visualization with R and Python
- R Markdown, Jupyter Notebook, SQL, MATLAB, Databricks and Git