

Website: https://manifoldpreacher.github.io/index.html

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Position held: Academic Council Staff, M&S Research Hub

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### Consultancy Work

2020/04	Uncorrelated Capital Asset Pricing Estimation for Multiasset
	Portfolio
	Estimated a Capital Asset Pricing Model for a panel of assets with uncorre-
	lated alpha and beta.
2021/04	Rotavirus Vaccine Economic Analysis
	Performed Economic analysis for the Rotavirus vaccine for different income classifications.
2020/10	Cafe Aghora Sales Consultancy
	Gave consultation for a data science team which analyzed optimal days for sales from Cafe Aghora in Bacolod City.
2020/10	Sta Rita Orphanage Data Engineering
	Gave consultation for a data science team which performed data engineering
	for Sta Rita Orphanage in Parañaque City.
2020/07	Alabel Municipal Hall Feasibility Study
	Prepared a feasibility study on the new municipal hall of Alabel, Sarangani.
2020/05	Outlook on Feeds and Grain Market
	Prepared an outlook analysis on the domestic markets for feeds and grains.
2020/01	Hotel Feasibility Study
	Estimated projected profits using quantitative methods on visitor, revenue, and geospatial data.
2020/01	Employee Turnover Analysis
	Crafted a survey to record key variables and performed statistical analysis to determine which variables affected the probability of turnover.
2019/11	Firm Profitability Analysis
	Obtained company time-series data on employee productivity and performed
	market research to determine their effects on the company's profits.

### Journal Articles

#### Empirical

2021/04	Expansionary Credit, Easy Money, and Boom-bust Cyles, 1867–1970: Causal-
·	ity Analysis with Impulse Response
Economics Notes (in-review)	A paper testing Austrian Business Cycle Theory using time series and difference equation analysis.

# Working Papers

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WIP | Historical Climate Factors and Rice Prices in the Philippines

MSR Working Paper Series | A paper analyzing how rice prices in the Philippines have responded to historical climate factors.

## Case Studies

### Transportation

2019/08	Developing a Provincial Destination Choice Model of the Philippines
	Developed a model assigning weights to factors affecting domestic traveller choice of provincial destination in the Philippines.
2019/03	Route Assignment for Travel between Metro Manila Central Business Districts
	Determined optimal route assignments for travelers between Makati, Ortigas, and Bonifacio Global City using linear programming methods.
2018/12	Mode Choice Analysis of New York City
2018/08	Undertook mode choice analysis of passenger behavior in New York City using 2017 data.  Estimation of the Lane–Mile Elasticity of Metro Manila Traffic
	Estimated the magnitude of effect of road size and expansions on traffic in Metro Manila in the Philippines using linear regression methods.

#### Miscellaneous

#### Training

### M&S Research Hub

2021/3	Bayesian Inference for Data Science and Research
	Gave introductory training for Bayesian inference theory and applications to statistical inference and regression analysis.
2020/11-12	Open Economy Models, Dynamic CGE, and SAM Balancing with
•	GAMS
	Gave training for Computable General Equilibrium models with GAMS.
2020/11	Bayesian SVAR and Regime Switching Models Using R and Stata
·	Gave introductory training to the theory and practice of Structural Vector Autoregressions, Bayesian Inference, and Regime Switching Models with Stata.

## Software Development

WIP | Project Management and Monitoring Pipeline Software (PMMPS) | Built a data pipeline that facilitates project management and monitoring for consultancy firms.

#### Positions Held

#### Formation

2024/09	Master of Science in Mathematics (in-progress)
	Open University, United Kingdom
2019/12	Bachelor of Science in Applied Economics, Major in Industrial
	Economics
	De La Salle University, Philippines
	Thesis: "Developing a Provincial Destination Choice Model of the
	Philippines"
	Advisor: Lawrence B. Dacuycuy
	cGPA: 3.193/4.0

### Languages

English: Mother Tongue Tagalog: Fluent

Tagalog: Fluent Kapampangan: Intermediate

Latin: Ecclesiastical Usage

### Programming Languages

Intermediate: Python, R, LATEX, HTML, CSS

Basic: Julia, C#

Software Packages: Statsmodels, PYMC3, Sckit-Learn, Theano

Operating Systems Used: Ubuntu, Manjaro, ArtixLinux Other Software Used: SageMath, Stata, GAMS, OnlyOffice

#### Interests and Activities

Main Fields: Mathematics, Statistics

Concentrations: Probability Theory, Stochastic Processes, Regression Analysis, Transportation Re-

search, Decision Theory

Incidental Interests: Scholastic Philosophy, Medieval Studies

#### References

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