

Saruul Khasar

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SUMMARY

A former quantitative economics Ph.D. student with 5+ years of experience in forecasting, econometric modeling, financial data analysis and reporting, data manipulation, and data visualizations.

TECHNICAL SKILLS

Languages: Python (pandas, numpy, statsmodels, matplotlib, sklearn), R, PostgreSQL (AWS RDS)
Technologies: Git, Tableau, Power BI, Microsoft Excel, LaTeX, Eviews, Stata
Statistics: Regression analysis, Time series analysis, Hypothesis testing

WORK EXPERIENCE

Division of Financial Management, State of Idaho

Boise, ID

Forecasting Economist

Nov 2020 – present

- Developed a new statistical prediction model for sales tax and tax relief fund using SARIMA and regression models; reduced testing set errors by 30 percent, and reported the prediction outcomes every month.
- Constructing budget forecasting models by cleaning and manipulating datasets collected from multiple agencies; creating Tableau dashboards for preliminary descriptive analysis, and testing regression models on Python and R for the Top 10 budget components.
- Created [monthly](#) and [quarterly](#) economic analysis reports and automated visualizations on Python using matplotlib, seaborn, and plotly.

NewPoint.io

Seattle, WA

Data Scientist intern

Jun 2020 – Nov 2020

- Developed index metrics scaled from 1 to 100 to measure students' job-related experiences and the strength of profile matches for prospective employers; created guidelines and worked closely with the engineering team to incorporate the metrics on the virtual job fair platform.
- Cleaned and manipulated 8 million computers' specifications and settings dataset on AWS SageMaker; trained Random Forest and CatBoost models to predict the computer's probability of getting malware; presented the findings to stakeholders using PowerBI dashboard.

Central Bank of Mongolia

Ulaanbaatar, Mongolia

Research Economist

Mar 2015 – Aug 2018

- Created, maintained, and reported key financial metrics (e.g. NPL, LTV, D/E and maturity mismatch ratios) dashboard for 14 commercial banks' 12 billions USD worth of assets and liabilities to help monitor credit risk, liquidity risk, and markets risks.
- Predicted banks' propensity to endure liquidity risk using regression models and assessed required liquid assets to overcome the liquidity risk.
- Measured effectiveness of some macroprudential tools on banking sector loan supply using multivariate regression model on panel data and published a research paper titled [Macroprudential Policy analysis](#) in The South East Asian Central Banks (SEACEN) Research Journal.

EDUCATION

University of Washington, Seattle

MA in Econometrics and Quantitative Economics

Sep 2018 – Jun 2020

Coursework: Advanced Statistics, Programming, Database Management, Time-Series Analysis

University of Michigan, Ann Arbor

MA in Applied Economics

Sep 2013 – Dec 2014

Coursework: Statistics, Quantitative Methods, Econometrics, Applied Business Forecasting

National University of Mongolia

BA in Economics

Sep 2008 – Jun 2013

Coursework: Linear Algebra, Econometrics, Mathematical Economics, Economic Modeling