

Enkhmanlai “Manlai” Amarsaikhan

Data Scientist | San Francisco Bay Area | a.enkhmanlai@gmail.com
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Summary

An economist / analyst with 5+ years of experience in wrangling and integrating disparate raw datasets, performing exploratory analysis, and using predictive models to deliver insights and implement solutions. Have an advanced working knowledge of statistical, data science and other data analytics methods and is an effective Python programmer, with a Master's degree in Economics.

Skills

- Languages: Python (scikit-learn, pandas, numpy, scipy), SQL, Git Bash, LaTeX, Matlab
- Data Visualization: Matplotlib, Seaborn, Tableau
- Database Management: SQLite, BigQuery, Databricks
- Machine Learning: Feature Engineering, KNN, Random Forest, Linear/Logistic Regression, xgboost, Bagging/Boosting Models, Neural Networks (Keras, Tensorflow), PCA, Clustering, NLTK, NLP, Model Evaluation
- Economics: Statistics, A/B Testing, Experiment Design, Applied Econometrics, Research Methodology, Causal Inference, ARIMA, VAR Models, Matching Markets

Work Experience

- | | |
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| Oyuny Tsomorlig Impex LLC | Sep 2017 - Present |
| Data Analyst / Economist | Remote |
| <ul style="list-style-type: none">• Applied statistical, mathematical and other analytical methods to analyze and interpret key points from gathered data• Led a team of economists in designing and conducting surveys and field experiments to collect data, cleaning and wrangling data, and building and analyzing data mining models• Developed monthly roadmaps based on impact, effort and results, worked with stakeholders to achieve short-term and long-term goals on projects• Collaborated with researchers by implementing machine learning models to analyze image data whose results were published in a top academic journal | |
| General Assembly | Sep - Dec 2022 |
| Data Science Fellow | Remote |
| <ul style="list-style-type: none">• Built a classification model using the scikit-learn library in Python that classifies the severity of vehicle collisions in NYC that correctly classifies the positive class 30 percentage points better than the baseline.• Built an autoregressive LSTM neural network using the Keras library in Python that correctly forecasts the weekly NYC collision total with an R^2-score of 0.99.• Built a Python module that scrapes Reddit data, extracts features using NLP and employs grid-search to tune hyperparameters of ML models such as logistic regression, SVM, random forest and bagging/boosting models | |

- Using the pandas library in Python, cleaned and explored a housing market dataset, feature-engineered and designed a linear regression model using the scikit-learn library that predicts 92% of the variation in housing prices

Boston College

Sep 2015 - Aug 2020

Graduate Student Researcher

Chestnut Hill, MA

- Conducted own research in the field of microeconomics and two-sided matching market theory, produced 2 academic research papers and presented results to research workshops
- Wrote scalable and effective code in Python and Matlab for matching theory algorithms, linear and nonlinear optimization problems that were used to analyze and interpret data in research
- Designed, prepared and taught 3 elective-level college courses as the sole instructor for 3 years
- Helped students better understand course material by working through problems and relating course material to real-world situations

Awards

Japanese Government (MEXT) Scholarship (Full Tuition Remission and Stipend)

2007 - 2012

Best Paper Award, "Geoinformation-2012" International Conference

2012

Full Tuition Remission and Stipend, Boston College

2013 - 2018

Publications

Amarsaikhan, Enkhmanlai, et al. "Estimation and mapping of pasture biomass in Mongolia using machine learning methods." *Geocarto International* (2023): 1-19.

Education

General Assembly

Sep - Dec 2022

Data Science Immersive

Remote

Boston College

Sep 2015 - Aug 2020

ABD PhD in Economics

Chestnut Hill, MA

Passed doctoral comprehensive examinations in 2014

Boston College

Sep 2013 - May 2015

MA in Economics

Chestnut Hill, MA

University of Tokyo

Apr 2008 - Mar 2012

BA in Economics

Tokyo, Japan

Placed 1st overall on entrance examinations for MEXT scholarship students