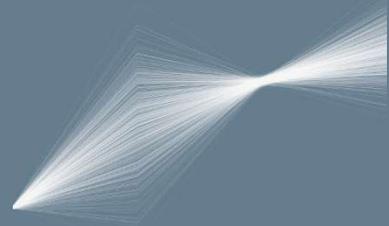




Meaningful demand forecasts at any grain.

CatFish is a Bayesian Intelligence forecasting system. It provides location-specific, aggregably consistent, full joint distribution demand inference with human interpretable factors.



GET STARTED IN MATLAB

READ THE HANDBOOK

CatFish is a multi-dimensional demand forecasting and decision support system based on a Bayesian **Categorical** variable multiplicative **Poisson** model. It leverages contextual data - including expert knowledge, outside forecasts, and independent covariates - to help you understand the location-specific determinants of your demand. With CatFish you can produce accurate, consistently aggregable and disaggregable, full distribution regionalized forecasts specific to your supply chain.

White box modelling

CatFish is not a black box Artificial Neural Network (ANN) model. It provides identified values for potentially millions of categorical variables. Leverage spatial and temporal data on products, weather, demographics, and more to understand your demand and its forecasts.

Full distribution

Get the full joint distribution, not point estimates. Distributions are key to sophisticated business decision making, including supply-chain management and risk analysis. CatFish's mixed Poisson and negative binomial meet most use cases.

Consistent Aggregation

CatFish supports any number and type of dimensions; infer demand from locations and for whatever characteristics match your supply chain. And make coherent operational, strategic, and financial decisions from forecasts that consistently aggregate and disaggregate to any grain.

Scalable Bayesian

CatFish is a cloud-scalable fully Bayesian model: Use expert beliefs to refine predictions or conduct what-if analysis when data is limited. Use hierarchical priors to learn distributional parameters. Use demand and contextual data to build up to petabyte-scale models when information is available.

Time series support

Unlike other forecasting models, CatFish is primarily cross-sectional. However, its time dimensions support random walks with drift, extrapolated trends, and other time series functionality.[†] Trends can also be imported for any time-related variable from outside models.[†]

Superior accuracy

CatFish is competitive with state-of-the-art 1D and 2D statistical and ANN-based time-series models in the time dimension. And it can use their trends as a starting point.[†] But every meaningful dimension and factor added to a CatFish model increases its capabilities and accuracy.

[†] This functionality is currently in development.