

Matt Motoki

Kaggle Grandmaster · ML/AI Evaluation & Benchmark Design

Remote | mattmotoki.github.io | [Kaggle](#) | [GitHub](#) | [Google Scholar](#)

Senior data scientist and machine-learning specialist with over a decade of experience in applied ML. **Kaggle Competitions Grandmaster** (peak global rank 18) with 13 national and international awards in competitions run by NASA, the U.S. Department of Energy, the U.S. Department of Justice, and NeurIPS. Doing well in competitions requires a careful understanding of how evaluations work: where target leakage shows up, which metrics can be exploited, and when data splits are unrealistic. Regularly evaluates the capabilities of current AI models in personal projects.

EXPERIENCE

Shifted Energy — Staff Data Scientist | Honolulu, HI / Remote · Aug 2021 – Jun 2025

Led production machine-learning and optimization systems deployed across thousands of connected devices worldwide. Designed the validation and measurement & verification frameworks used to judge model and system performance on live data.

H2O.ai — Senior Data Scientist | Mountain View, CA / Remote · Jun 2020 – Aug 2021

Built algorithms and product features for **enterprise AutoML software** — including automated validation schemes and leaderboard/metric design — and partnered with customer-facing data scientists on Fortune 500 use cases.

Iterable — Senior Data Scientist | San Francisco, CA · Jun 2019 – May 2020

Developed machine-learning methods for **terabyte-scale customer engagement prediction**, modeling individual user behavior from large-scale event and interaction logs.

Independent — Data Science Consultant | Honolulu, HI · Jul 2017 – Jun 2019

Built predictive models, analyses, and dashboards for a remote-sensing startup, academic researchers, and local startups.

HiVet Solutions — Data Scientist | Honolulu, HI · Mar 2016 – May 2017

Developed data-driven methods for workforce planning, hiring, and compensation analysis with HR and Finance teams.

SELECTED COMPETITION RESULTS

- **NASA Airport Throughput Prediction Challenge**, 2025 — **1st Place · \$30,000** — short-horizon prediction from large historical operations data
- **Net Load Forecasting Prize** (U.S. DOE), 2023 — **2nd Place · \$150,000** — large-scale prediction under high uncertainty
- **Digitizing Utilities Prize** (U.S. DOE), 2023 — **Phase 1 Winner · \$75,000** — analytics application turning messy operational data into decisions
- **NIJ Recidivism Forecasting Challenge** (U.S. DOJ), 2021 — **Prize Winner · \$48,500** — individual-level probabilistic classification, balancing accuracy, calibration, and demographic fairness
- **ASHRAE Great Energy Predictor III**, 2019 — **1st Place · \$10,000** — large-scale tabular prediction on Kaggle (3,600+ teams)

Also: eight further awards in forecasting and optimization, including the American-Made Solar Forecasting Prize (Runner-up · \$25,000) and two NeurIPS CityLearn Challenges (1st and 2nd). \$350,000+ total across 13 prediction, forecasting, and optimization awards (2017–2026).

EDUCATION

- **Doctoral Research, Electrical & Computer Engineering** — University of Washington · 2022 – 2025 — machine learning, game theory & optimization for large-scale prediction
- **M.S., Electrical Engineering** — University of Hawai'i at Mānoa · Dec 2015
- **B.S., Mathematics** — University of Hawai'i at Mānoa · Aug 2014

CORE SKILLS

Evaluation & benchmark design · Scenario & task creation with unambiguous ground truth · Target-leakage detection & honest validation · Metric design & exploit analysis · Difficulty calibration · LLM evals & rubric design · Gradient boosting, deep learning & tabular ML · Probability calibration · Reproducible ML pipelines · Python · PyTorch