

MICHAEL PILOSOV, PHD

Mathematics x Engineering x Creativity

FROM IDEATION TO EXECUTION, EXCELLENCE AT EVERY LEVEL

Navigates nuanced problem domains and business requirements.

Values active iteration, communication, and tight collaboration.

Ships software products continuously, frequently, and confidently.

Defines architecture to support long-term maintenance and improvement.

WRITES CODE FOR PEOPLE, NOT MACHINES

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|------------------------------------|--------------|------------------------------|---------------------|
| - Python + packaging thereof | - Flask | - Amazon Web Services | - Containers |
| - Scripting in BASH & Shell | - [py] Spark | - Google Cloud Platform | - Pipelines |
| - Matlab | - SQL | - Microsoft Azure | - EC2, Lambda |
| - OpenCV, FFMPEG, ImageMagick | - Binder | - Testing & Coverage | - Git [hub lab] |
| - HuggingFace, PyTorch, Tensorflow | - ML Flow | - Jupyter [Hub NB Lab] | - Databricks |

CODE QUALITY, REPRODUCIBLE WORKFLOWS, & MATHEMATICAL RIGOR

Slalom Build – Senior Architect, Machine Learning

AUG 2019 – PRESENT | DENVER, COLORADO

- Leads teams in crafting creative solutions powered by principled engineering (and math).
- Translated clients' vision into design and architecture decisions that solved a diverse range of business problems, including voice-driven AI, advertising, and finance.
- Designed and implemented production-grade machine learning pipelines with extensive CI/CD, automatic retraining, model governance, and regression tests.
- Developed two Natural Language Processing products for global tech companies.
- Created an automated and personalized advertising inventory system for app developers. Improved relevancy, depth, and breadth of recommendations by rethinking model-training. Increased number of items for auction 350% and app downloads 15%. Grew the number of targetable customers by 12X.

CU Denver, Department of Mathematics – Research & Teaching Assistant

AUG 2014 – AUG 2019 | DENVER, COLORADO

- Performed foundational research and active software development for quantifying and reducing uncertainty in Gulf Coast hurricane storm surge to inform evacuation planning.
- Mentored students and organized numerous outreach events for mathematics enrichment.
- Lowered barrier to entry for hundreds of students to learn programming by deploying and maintaining Jupyterhub servers, providing a rich browser-based development environment.

Los Alamos National Laboratory – Summer Graduate Student Research Intern

JUN 2017 – AUG 2017 | LOS ALAMOS, NEW MEXICO

- Researched strategies for tracking groundwater pollutants from WW2-era industrial waste to inform contaminant remediation policy decisions.
- Contributed to Julia package for simulations on distributed computing systems.

DRAWS ON BROAD EXPERTISE TO EMPOWER OTHERS & FOSTER GROWTH

University of Colorado, Denver – PhD Applied Mathematics (2020)