MICHAEL PILOSOV

Applied Mathematics x Software Engineering x Machine Learning DevOps

SKILLS

Python, Matlab, Bash, R, Linux, C++, Julia, Git/Hg/VCS, Spark, Uncertainty Quantification, Machine Learning, Inverse Problems, Bayesian Statistics, Optimal Experimental Design.

Project Management, Modeling, Data-Driven Decision Making, Interdisciplinary Collaboration.

Jupyter ecosystem, Cloud-Computing, Containerization, AWS Sagemaker, Github Actions, Open-Source Software, Docker, Agile, Unit-Testing, Continuous Integration and Deployment.

EXPERIENCE

Slalom Build — Architect, Data Engineering

AUG 2019 - PRESENT | DENVER, COLORADO

- Worked with clients to define product vision and design decisions for algorithmic solutions to internal business problems as well as improving customer experience.
- Responsible for designing and implementing production-grade machine learning pipelines, including CI/CD for deployment, automatic retraining, and regression tests.
- Developed two Natural Language Processing products for a global technology company.

CU Denver, Dept of Mathematics — Research Assistant, Teaching Assistant

AUG 2014 - AUG 2019 | DENVER, COLORADO

- Developed novel methods for parameter estimation using measure theory and probability.
- Performed foundational research and active software development under several grants.
- Configured and deployed Jupyterhub server for computational mathematics classes.

Los Alamos National Laboratory — *Graduate Research Summer Internship*

JUN 2017 - AUG 2017 | LOS ALAMOS, NEW MEXICO

- Multi-physics model of contaminant transport used to track Cr-6 (hexavalent chromium).
- Used data assimilation to explore remediation strategies under uncertainty.

Geneseo Research Foundation — Undergraduate Summer Research Fellow

JUN 2013 - AUG 2013 | GENESEO, NEW YORK

- Wrote and received a grant for a project combining art, math, and computer science.
- Developed mathematics and associated software to automate animating still images.

As Green As It Gets / De La Gente - Volunteer Data Analyst

NOV 2012 - DEC 2012 | SAN-MIGUEL ESCOBAR, GUATEMALA

- Built model of coffee cooperative to predict future agricultural yields.
- Proposed strategies to mitigate fluctuations within tight budgetary constraints.

EDUCATION

University of Colorado, Denver — PhD Applied Mathematics (2020), MS Mathematics of Science & Engineering (2017)

State University of New York: College at Geneseo — BA Mathematics (2014)