

MICHAEL PILOSOV

Applied Mathematics x Software Engineering x Machine Learning DevOps

SKILLS

Python, Matlab, Bash, R, Linux, C++, Julia, Git/Hg, 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)*