

# MICHAEL PILOSOV

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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.

## 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)*