

Martin Skarzynski Laptev

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Mission

My goal is to lead the next generation of scientists and engineers in building solutions that integrate substantive expertise from diverse fields with machine intelligence. Through my work, I strive to promote open source software, such as the [Quarto](#) publishing system, which I use to build dashboards, presentations, reports, websites, and other digital deliverables. Overall, I aim to leverage my broad scientific background and technical expertise to help transform the promises of science and technology into a better future for all of humanity.

Experience

Lead Instructor, [General Assembly](#)

2019:

- Teaches [open-enrollment](#) and enterprise courses such as:
 - [React Development](#)
 - [Data Analytics](#)
 - [Data Science](#)
 - [Python Programming](#)
 - [Web Development](#)

Lead Instructor, [Data Society](#)

2019:

- Provides enterprise clients with training in:
 - Machine Learning
 - DevOps & MLOps
 - Python & R Programming
 - Generative AI
 - Graph Analytics
 - Text Analysis & NLP

Senior Domain Lead, [Amazon Web Services](#)

2022:2024

- Provided customers with scientific and technical expertise in:
 - [Computer Vision](#)
 - [Data Architecture](#)
 - [Data Visualization](#)
 - [Genomics](#)
 - [Machine Learning](#)
 - [Real World Evidence](#)
- Built Artificial Intelligence (AI) solutions and Machine Learning Operations (MLOps) systems using:
 - [Amazon SageMaker](#)
 - [AWS Developer Tools](#)
 - [AWS Lambda](#)
 - [Amazon EventBridge](#)
 - [AWS CloudFormation](#)
 - [AWS IAM](#)
 - [Amazon EMR](#)
 - [AWS Databases](#)
 - [AWS Service Catalog](#)
- Obtained 3 AWS certification
 - [Practical Data Science](#)
 - [Cloud Practitioner](#)
 - [Solutions Architect Associate](#)

Adjunct Professor, Virginia Tech

2021:2024

- Taught two graduate courses for the Computer Science and Statistics Departments:
 - [Machine Learning](#)
 - [Data Analytics](#)

Vice President, [Data Community DC](#)

2022:

- Leads a nonprofit organization that supports [eleven Meetup groups](#)

AI Engineering Manager, [Booz Allen Hamilton](#)

2019:2023

- Led a team of data scientists and software developers working on a cyber intelligence application
- Spearheaded interdisciplinary COVID19 [visualization](#), [genomics](#), and statistical modeling efforts
- Obtained the [Microsoft Azure Data Scientist Associate](#) certification

Biomedical Scientist, [National Institutes of Health](#)

2009:2022

- Integrated clinical, laboratory, epidemiologic, genomic, and medical imaging data
- Combined deep learning and statistical inference using stacked ensembles
- Conducted genomic analysis of immune and cancer cells
- Developed and tested pharmaceutical and immunotherapeutic agents
- Quantified cancer cell signaling pathways
- Mentored trainees from various NIH training programs including:
 - [SIP](#)
 - [MRSP](#)
 - [HiSTEP](#)

Bioinformatics and Data Science Co-Chair, [FAES](#)

2014:2021

- Coadministered an academic program with over twenty faculty members
- Taught three graduate data science courses:
 - [Python Programming](#)
 - [Text Mining](#)
 - [Applied Machine Learning](#)
- Taught graduate biotechnology workshops on various topics including:
 - [Pharmacometrics](#)
 - [Cellular Immunology](#)
 - [Flow Cytometry](#)

Adjunct Professor, [George Washington University](#)

2015:2016

- Taught two undergraduate courses for the [Women's Leadership Program](#):
 - [Biology of Organisms](#)
 - [Women and Leadership](#)

Education

- **MPH**, Epidemiology and Biostatistics, [Johns Hopkins University](#) 2018
- **PhD**, Tumor Biology, [Georgetown University](#) 2015
- **MS**, Biotechnology, [Jagiellonian University](#) 2009
- **BA**, Biology, [St. Mary's College of Maryland](#) 2007

Publications

- [Potentiating \[mAb\] therapy by targeting complement C3 \[...\] on lymphoma cells](#) 2025
- [Recalibration of a deep learning model \[...\] to inform lung cancer screening intervals](#) 2023
- [\[COVID\] genomebased severity predictions correspond to \[...\] higher viral load](#) 2022
- [Linking genotype to phenotype \[...\] in \[COVID\] \[...\]](#) 2022
- [Variants in \[COVID\] associated with mild or severe outcome](#) 2021
- [Using prediction models to reduce \[...\] disparities in \[...\] lung cancer screening \[...\]](#) 2021
- [Pathogenic role of \[BCR\] signaling and canonical NF-κB activation in \[MCL\]](#) 2016
- [Interactions between ibrutinib and antiCD20 antibodies \[...\]](#) 2016
- [Health disparities in the immunoprevention of \[HPV\] \[...\] associated malignancies](#) 2015
- [Designing the furin cleavable linker in recombinant immunotoxins \[...\]](#) 2015
- [Harnessing the Fcμ receptor for \[...\] therapy of \[CLL\]](#) 2014

Awards

- **Community Contribution of the Year Category Finalist**, AWS Builder Awards 2023
- **Artificial Intelligence Solutions Architect Award**, BAH Emergent Skills Program 2022
- **Fellowship Research Award**, Cancer Prevention Fellowship Program 2019
- **Fellows Award for Research Excellence**, National Institutes of Health 2015
- **Orloff Science Award**, National Heart, Lung, Blood Institute 2014
- **Director's Science Award**, National Heart, Lung, Blood Institute 2014

Languages

- [ILR 5](#): English, Polish
- [ILR 4](#): Spanish, Russian
- [ILR 2](#): French, Portuguese

Skills

