

# 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 non-profit 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 COVID-19 [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

- Co-administered 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 *Submitted*
- [Recalibration of a deep learning model \[...\] to inform lung cancer screening intervals](#) 2023
- [\[COVID\] genome-based 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 anti-CD20 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

