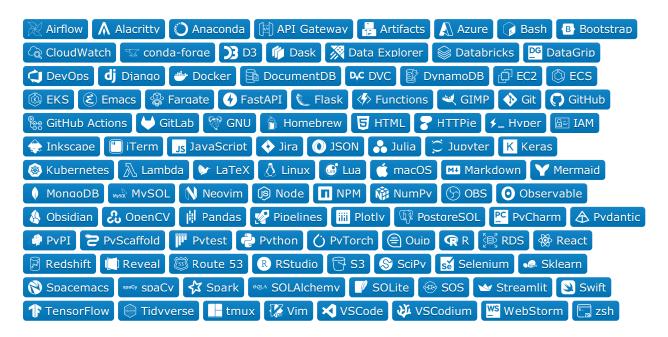
Martin Skarzynski Laptev

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 <u>Quarto</u> 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.

Skills



Recent Experience

Lead Instructor, General Assembly

2019:

- Teaches open-enrollment and enterprise courses such as:
 - React Development
- Data Analytics
- <u>Python Programming</u> <u>Web Development</u>
- Data Science

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

Vice President, **Data Community DC**

2022:

• Leads a nonprofit organization that supports eleven Meetup groups

Freelance Consultant, Plan Forward 2024: • Automates transformer model training and evaluation • Builds command-line interfaces • Creates dashboards for data and model exploration 2023: Freelance Consultant, CityDance • Deploys templates to parametrize student and teacher agreements Adjunct Professor, Virginia Tech 2021:2024 • Taught two graduate courses for the Computer Science and Statistics Departments: Machine Learning Data Analytics 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 AWS CloudFormation • AWS IAM Amazon EventBridge AWS Databases AWS Service Catalog Amazon EMR • Obtained 3 AWS certification Cloud Practitioner Practical Data Science Solutions Architect Associate 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 • 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:
 - Introduction to Python Introduction to Text Applied Machine Learning Mining
- Taught graduate biotechnology workshops on various topics including:
 - <u>Pharmacometrics</u> <u>Cellular Immunology</u> <u>Flow Cytometry</u>

- Taught two undergraduate courses for the Women's Leadership Program:
 - Biology of Organisms Women and Leadership

Education

• MPH, Epidemiology and Biostatistics, <u>Johns Hopkins University</u>	2018
• PhD, Tumor Biology, Georgetown University	2015
• MS, Biotechnology, <u>Jagiellonian University</u>	2009
• BA, Biology, St. Mary's College of Maryland	2007

Select 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] genomebased severity predictions correspond to [] higher viral load 2022
• Linking genotype to phenotype [] in [COVID] []
• <u>Variants in [COVID] associated with mild or severe outcome</u> 2021
• <u>Using prediction models to reduce [] disparities in [] lung cancer screening []</u> 2021
• Pathogenic role of [BCR] signaling and canonical NF-κB activation in [MCL] 2016
• <u>Interactions between ibrutinib and antiCD20 antibodies []</u> 2016
• Health disparities in the immunoprevention of [HPV] [] associated malignancies 2015
• Designing the furincleavable linker in recombinant immunotoxins [] 2015
• Harnessing the Fcµ receptor for [] therapy of [CLL]

Select 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

Natural Languages

• <u>ILR 5</u>: English, Polish • <u>ILR 4</u>: Spanish, Russian • <u>ILR 3</u>: French, Portuguese