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 <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.

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

Vice President, Data Community DC

2022:

• Leads a non-profit organization that supports eleven Meetup groups

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
- 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

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 <u>visualization</u>, <u>genomics</u>, 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, <u>Johns Hopkins University</u>	2016
• PhD, Tumor Biology, Georgetown University	201.
MS Biotechnology Jagiellonian University	200

Skills

Airflow Alacritty Amazon Web Services Anaconda Api Gateway Asana Asana
Blender B Bootstrap
EC2 BECS EKS ELasticache C Elastic Load Balancing E Emacs Express Fargate
FastAPI Flask GIMP Git GitHub GitHub Actions GitLab GitPod GNU
↑ Homebrew HTML HTTPie HuggingFace Hyper Inkscape Inkscape
Js JavaScript ♦ Jira ♠ Json ♣ Julia Ç Jupyter K Keras ♠ Kubernetes ⚠ Lambda ▶ LaTeX
⚠ Linux 💕 Lua 🕻 macOS 🖾 Markdown 🧡 Mermaid 🌘 MongoDB 🔊 MySQL 🚺 Neovim
Node
PostgreSQL PyCharm A Pydantic PyPI PyScaffold Pytest Python O PyTorch
ⓐ Quip
© Route 53
Slack
⊕ SQS Streamlit Swift TensorFlow ⊕ Tidyverse tmux Typescript W Vim
VSCode VSCodium WS WebStorm YAML Sh

Publications

• Potentiating [mAb] therapy by targeting complement C3 [] on lymphoma cells Sub	omitted
• 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
• <u>Variants in [COVID] associated with mild or severe outcome</u>	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

- <u>ILR 5</u>: English, Polish
- ILR 4: Spanish, Russian
- ILR 2: French, Portuguese