Martin Skarzynski Laptev

\(\sum_{240-207-1654} \) \(\sum_{\text{maptv}} \) \(\mathrm{maptv} \)

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

Chief Technology Officer, Ireni Co

2024:

- Builds applications based on the Dec measurement system
- Offers freelance consulting services to clients

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
 Generative AI
 DevOps & MLOps
 Python & R Programming
 Text Analysis & NLP

Senior Domain Lead, Amazon Web Services

2022:2024

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

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 <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
 - <u>Text Mining</u> <u>Applied Machine Learning</u>
- Taught graduate biotechnology workshops on various topics including:
 - <u>Pharmacometrics</u> <u>Cellular Immunology</u> <u>Flow Cytometry</u>

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> | 2018 |
|--|------|
| • PhD, Tumor Biology, Georgetown University | 2015 |
| • MS, Biotechnology, <u>Jagiellonian University</u> | 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] 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

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

Skills

