Martin Skarzynski Laptev

240-207-1654 maptv@engineer.com maptv.github.io maptv 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 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

Airflow | Alacritty | Amazon Web Services | Anaconda | API Gateway | Asana | Bash
Blender | Bootstrap | Chartjs | CodePen | CloudWatch | conda-forge | CSS | D3
Dask | Databricks | DataGrip | Django | Docker | DocumentDB | DVC | DynamoDB
EC2 | ECS | EKS | Elasticache | Elastic Load Balancing | Emacs | Express | Fargate
FastAPI | Flask | GIMP | Git | GitHub | GitHub Actions | GitLab | GitPod | GNU
Homebrew | HTML | HTTPie | HuggingFace | Hyper | IAM | Inkscape | iTerm
JavaScript | Jira | JSON | Julia | Jupyter | Keras | Kubernetes | Lambda | LaTeX
Linux | Lua | macOS | Markdown | Mermaid | MongoDB | MySQL | Neovim
Node | NPM | NumPy | OBS | Observable | Obsidian | OpenCV | Pandas | Plotly
PostgreSQL | PyCharm | Pydantic | PyPI | PyScaffold | Pytest | Python | PyTorch
Quip | R | RDS | React | README | Read The Docs | Redshift | Reveal
Route 53 | RStudio | S3 | Sass | SciPy | Secrets Manager | Selenium | Sklearn
Slack | Spacemacs | spaCy | Spark | Sphinx | SQLAlchemy | SQLite | SES
SQS | Streamlit | Swift | TensorFlow | Tidyverse | tmux | Typescript | Vim
VSCode | VSCodium | WebStorm | YAML | zsh