

Martin Skarzynski

DATA SCIENCE · EPIDEMIOLOGY · GENOMICS · MACHINE LEARNING · PUBLIC HEALTH · TECHNICAL MANAGEMENT · SOFTWARE ENGINEERING

📞 240-595-3460 | ✉️ mskar@dr.com | 🏠 mskar.github.io | 📷 mskar | 🌐 mskar | 🐦 marskar

Summary

My goal is to train and lead the next generation of data scientists to integrate substantive expertise from diverse fields with machine intelligence. Through research and teaching, I am constantly improving my ability to obtain, tidy, explore, transform, visualize, model, and communicate data. My preferred tools are Javascript, Python, and R, open source programming languages kept on the cutting edge by their energetic communities. In addition to their utility in common data science tasks, R and Python are easily accessible interfaces to machine learning libraries like TensorFlow. I aim to leverage my background in science and education to help shape the future of data science and deliver on the promise of machine learning.

Recent Experience

Artificial Intelligence Engineering Manager

BOOZ ALLEN HAMILTON

October 2019 - Present

- Leads a team of data scientists and software developers working on a cyber intelligence application
- Led interdisciplinary COVID-19 statistical modeling and genomic analysis efforts

Lead Instructor

DATA SOCIETY

October 2019 - Present

- Teaches courses such as:
 - Machine Learning
 - Deep Learning
 - DevOps
 - Data Science Bootcamp
 - Data Science Academy
 - Data Visualization
 - Natural Language Processing
 - Python Programming
 - R Programming

GENERAL ASSEMBLY

July 2019 - Present

- Teaches courses such as:
 - Data Science 5000
 - Python Programming
 - Tech Excellence Data Science
 - React Development
 - Data for Leaders
 - Front-End Web Development

Adjunct Professor

VIRGINIA TECH

September 2021 - Present

- Teaches graduate Data Analytics course

Treasurer

DATA COMMUNITY DC

April 2020 - Present

- Manages the finances of a non-profit organization that supports [eleven Meetup groups](#)

Cancer Prevention Fellow

BIOSTATISTICS BRANCH, DIVISION OF CANCER EPIDEMIOLOGY AND GENETICS, NATIONAL CANCER INSTITUTE

June 2017 - April 2021

- Integrated clinical, laboratory, epidemiologic, genomic, and medical imaging data
- Combined deep learning and statistical inference using stacked ensembles

Bioinformatics and Data Science Department Co-Chair

FOUNDATION FOR ADVANCED EDUCATION IN THE SCIENCES

January 2014 - May 2020

- Co-administered an academic program with over twenty faculty members
- Taught three graduate data science courses:
 - Introduction to Python
 - Introduction to Text Mining
 - Applied Machine Learning
- Taught nine graduate biotechnology workshops:
 - Pharmacometric Analyses using R
 - Junior Scientist Training Program
 - Immunochemistry and Antibodies
 - Recombinant DNA Methodology
 - Research Tools for Studying Disease
 - Cancer Prevention
 - Cellular Immunology
 - Genetics Institute
 - Flow Cytometry

Online Course Developer

DATA CAMP

October 2018 - Present

- Developed an online course called [Creating Robust Python Workflows](#) (part of Coding Best Practices track)

Postdoctoral Fellow

NATIONAL CANCER INSTITUTE

July 2015 - June 2017

- Conducted genomic analysis of immune and cancer cells
- Developed and tested immunotherapeutic agents
- Mentored a trainee from the NIH High School Scientific and Training Enrichment Program

Adjunct Professor

GEORGE WASHINGTON UNIVERSITY

January 2015 - May 2015

- Taught two undergraduate courses:
 - Biology of Organisms
 - Women and Leadership

Predoctoral Fellow

NATIONAL INSTITUTES OF HEALTH

July 2009 - October 2015

- Tested kinase inhibitor and monoclonal antibody therapeutic efficacy and drug interactions
- Engineered and assayed therapeutic immunotoxins
- Quantified cancer cell signaling pathways
- Mentored trainees from three different NIH training programs:
 - Summer Internship Program
 - Medical Research Scholars Program
 - Biomedical Research Training Program for Individuals from Underrepresented Groups

Select Publications

SARS-CoV-2 genome-based severity predictions correspond to [...] higher viral load

MEDRXIV

Nov. 2021

Variants in SARS-CoV-2 associated with mild or severe outcome

EVOLUTION, MEDICINE, AND PUBLIC HEALTH

June 2021

Using prediction models to reduce [...] disparities in [...] lung cancer screening [...]

JOURNAL OF THE NATIONAL CANCER INSTITUTE

Jan. 2021

Interactions between ibrutinib and anti-CD20 antibodies [...] combination therapy

CLINICAL CANCER RESEARCH

Jan. 2016

Designing the furin-cleavable Linker in recombinant immunotoxins [...]

BIOCONJUGATE CHEMISTRY

May 2015

Health disparities in the immunoprevention of [HPV] [...] associated malignancies

FRONTIERS IN PUBLIC HEALTH

Dec. 2015

Harnessing the Fcμ receptor for potent and selective cytotoxic therapy of [CLL]

CANCER RESEARCH

Oct 2014

Education

MPH, Epidemiologic and Biostatistical Methods for Public Health and Clinical Research

JOHNS HOPKINS UNIVERSITY SCHOOL OF PUBLIC HEALTH

May 2018

- Data Science Certificate

PhD, Tumor Biology

GEORGETOWN UNIVERSITY-NIH GRADUATE PARTNERSHIPS PROGRAM

May 2015

- Teaching Certificate

MS, Biotechnology

JAGIELLONIAN UNIVERSITY

June 2009

BA, Biology

ST. MARY'S COLLEGE OF MARYLAND

May 2007

Select Awards

Trans-Fellowship Research Award

CANCER PREVENTION FELLOWSHIP PROGRAM

June 2019

Cancer Research Training Award

NATIONAL CANCER INSTITUTE

November 2015

Fellows Award for Research Excellence

NATIONAL INSTITUTES OF HEALTH

June 2015

Director's Award

NATIONAL HEART LUNG BLOOD INSTITUTE

October 2014

Orloff Science Award

NATIONAL HEART LUNG BLOOD INSTITUTE

January 2014