# MARINA VABISTSEVITS

Doctoral student at the University of Bristol, working in the interdisiplinary research applying data mining methods to answer epidemological questions



PhD, Data mining in Epidemiology 2023 University of Bristol

O Bristol, UK

MSc, Bioinformatics 2017 University of Copenhagen

🗣 Copenhagen, Denmark

**BSc**, Biochemistry University of Bath

OBath. UK

## ♣ RESEARCH EXPERIENCE

**Doctoral Student** 

MRC Intergative Epidemiology Unit

University of Bristol

- · Mini-project 1: Implemented a generalisable R workflow of performing multivariate correlation analysis (metaCCA) on several GWAS, using summary statistics from MR-Base, in order to find pleiotropic variants across the measured traits
- · Mini-project 2: Carried out a Mendelian Randomisation study to investigate the mechanism mediating the effect of early life BMI on breast cancer risk
- · Main PhD project: Will be working with EpiGraphDB, a graph database, to answer causal relationship questions in epidemiology using data mining methods

2017 2016

2019

2015 2015

2011

2023

2019

### Visiting Researcher / Master's Thesis Student

Danish Cancer Research Centre

• Copenhagen, Denmark

- · Explored TCGA breast cancer gene expression RNA-Seq data to identify the involvement of autophagy-related genes in certain disease subtypes.
- · Performed extensive EDA, followed by differential expression analysis and enrichment analysis, allowing me to find over-represented autophagy genes



#### INDUSTRY EXPERIENCE

2019 2017

#### Bioinformatician

Living DNA

• Frome, UK

- · Led the research work on improving the ancestry reference panels used by the core pipeline behind the company's direct-to-consumer ancestry genetics test, bringing considerable improvement to results accuracy
- · Gained experience in working with a legacy codebase through maintaining and contributing to the in-house pipelines (Python)
- · Honed my R programming skills by switching to tidyverse approach and advanced mv data visualisation skills

2017 2016

## Student research assistant in the Big Data group

3Shape

Openhagen, Denmark

- · Performed data preparation and visualisation tasks in Python, gaining practical experience of programming in a professional environment
- · Used deep learning framework Caffe2 to develop a neural network training pipeline for scan image classification tasks

2014 2013

#### Placement Student in Bioinformatics team

Oxford Gene Technology

Oxford, UK

· Became responsible for a multitude of exome- and RNA-seg projects, running inhouse data analysis pipelines and performing custom analysis for different projects



## CONTACT

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github.com/mvab

marinalearning.netlify.com

in linkedin.com/marina-

vabistsevits-82590443

### TECH SKILLS

R/tidyverse	
Python3	
Bash / awk	
Git	
SQL	
Docker	
AWS	
LaTeX	

#### OTHER SKILLS

#### For fun I like to

- -attend in BristolR and Py-Data meetups
- -listen to Data Science pod-
- -participate in hackathons / data challenges

See full CV at marinalearning.netlify.com/cv

Made w/ pagedown.

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