

Roberto Preste

PhD Student

Mixing Bioinformatics, Data Science and Web Development to build database and analysis systems that allow to explore and reuse biological data. Python and R enthusiast, always looking for new ways to solve problems through programming.



roberto.preste@gmail.com

+39 351 969 1456

robertopreste.com

linkedin.com/in/robertopreste

twitter.com/robertopreste

github.com/robertopreste

WORK EXPERIENCE

Bioinformatician

ELIXIR Project "Integration of the ELIXIR-IIB HmtDB resource into RD-Connect"

05/2018 – 06/2018

Bari, IT

Institute of Biomembranes, Bioenergetics and Molecular Biotechnologies, National Research Council

Achievements/Tasks

- Development of an Application Programming Interface (API) to allow programmatic access to HmtDB data
- Standardization of the HmtDB data format according to RD-Connect specifications

Cofounder

BROWSer - Bioinformatics Resource for Omics-Wide Services

10/2016 – Present

Bari, IT

Spin-off of the University of Bari "Aldo Moro"

Achievements/Tasks

- Haemodynamics data analysis and visualisation
- Development of bioinformatics analysis pipelines to analyse NGS data from WES and RNA-Seq projects
- Design and development of the BROWSer website

Web Developer

ELIXIR Hub, Wellcome Trust Genome Campus

03/2016 – 09/2016

Cambridge, UK

European Bioinformatics Institute (EBI-EMBL)

Achievements/Tasks

- Management of the ELIXIR intranet
- Design and development of the Bioschemas website
- Design and production of a registry and validation portal for Bioschemas data

EDUCATION

Phd Student in Functional and Applied Genomics and Proteomics

University of Bari "Aldo Moro"

11/2016 – Present

Bari, IT

Courses

- Study and development of Big Data analysis protocols for biological data in mitochondrial genomics

Master's Degree in Cellular and Molecular Biology

University of Bari "Aldo Moro"

10/2013 – 07/2015

Bari, IT

Bachelor's Degree in Medical and Pharmaceutical Biotechnologies

University of Bari "Aldo Moro"

10/2009 – 07/2013

Bari, IT

SKILLS

Python

R

Bioinformatics

Data Science

Genomics

Databases

Machine Learning

Shell

Web Development

Julia

PUBLICATIONS

HmtVar: a new resource for human mitochondrial variations and pathogenicity data

Nucleic Acids Res, 2018 - DOI: 10.1093/nar/gky1024

HmtVar: a brand-new resource for human mitochondrial variations and pathogenicity data

BioRxiv, 2018 - DOI: 10.1101/355461

NumtS colonization in mammalian genomes

Sci Rep, 2017 - DOI: 10.1038/s41598-017-16750-2

HmtDB 2016: data update, a better performing query system and human mitochondrial DNA haplogroup predictor

Nucleic Acids Res, 2017 - DOI: 10.1093/nar/gkw1066

PROJECTS

mitovizR (01/2019 – Present)

- R package to plot human mitochondrial variants from dataframes, VCF or JSON files (<https://github.com/robertopreste/mitovizR>)

HmtVar (06/2018 – Present)

- Database of human mitochondrial variants (<https://www.hmtvar.uniba.it>)

BROWSer website (10/2016 – Present)

- Website for the BROWSer spin-off (<https://www.browser-bioinf.com>)

Bioschemas website

- Website for the Bioschemas ELIXIR project (<http://bioschemas.org>)

HmtDB (10/2014 – Present)

- Database of human mitochondrial genomes (<https://www.hmtdb.uniba.it>)

CERTIFICATES

Data Science Specialization

Data Science Specialization from Johns Hopkins University on Coursera.org (License XQJQCG2DM6L5)

EF SET English Certificate - C2 Proficient

EF Standard English Test (EF SET) 86/100 (C2 Proficient)

LANGUAGES

Italian



English

