Robert Lesurf

Senior Bioinformatician

Personal Information

Address:
Available upon request

Phone:
+1 647-679-8446

Email:
robert.lesurf@gmail.com

Website:
lesurf.org

LinkedIn:
linkedin.com/in/robertlesurf

Technical Skills

Bioinformatics
Genomics
Data Analysis
Machine Learning
Statistical Modeling
Data Visualization
Cluster Computing
Version Control
Fluent in English & French

Soft Skills

Leadership
Management
Critical Thinking
Problem Solving
Decision Making
Teamwork & Collaboration
Oral & Written Communication

Programming Languages

R
Python
Perl
HTML
Java
SQL
Unix

Organized professional with over a decade of research experience in genomics, bioinformatics, and machine learning. Distinguished leadership resulting in the completion and publication of eighteen peer-reviewed scientific studies. I have a passion for data analysis, visualization, problem solving, and summarizing results to broad audiences.

Experience

Jan 2019 - Present — **Senior Bioinformatician**
The Hospital for Sick Children (SickKids), Toronto, ON, Canada
- Leading internal and international bioinformatics team collaborations.
- Supervising students and their research projects.
- Advising hospital migration to cloud compute environments.
- Identifying genomic variants that cause heart disease in children, and the influence of these variants on disease severity and outcome.

Sep 2016 - Jan 2019 — **Bioinformatician, Data Scientist**
Ontario Institute for Cancer Research, Toronto, ON, Canada
- Led team development for genomics data analysis pipeline, bringing software tools into a unified framework for automated quality control and analysis of sequencing data.
- Developed machine learning pipeline to increase accuracy of diagnostic and prognostic biomarkers in prostate cancer.
- Led and co-analyzed several other cancer genomics research projects.

Sep 2014 - Sep 2016 — **Postdoctoral Research Associate**
McDonnell Genome Institute, Washington University, St. Louis, MO, USA
- Led genomics analysis for clinical trial of breast cancer, computationally identified genomic and transcriptional features predictive of drug response.
- Designed a 'regulome' capture targets in partnership with Roche.
- Built data visualization functions for the GenVisR R package.
- Mentored students and junior employees.

Education

2008-2014 — **Ph.D. - McGill University, Montreal, QC, Canada**
Biochemistry (Bioinformatics option)
- Used machine learning and microarray data to identify and predict early stage breast cancer patients who may be safely spared therapy.
- Developed visualization algorithms for genomic signatures across tumours.

2006-2008 — **M.Sc. - McGill University, Montreal, QC, Canada**
Computer Science (Bioinformatics option)
- Identified genomic features of mouse models for human cancer.

2002-2006 — **B.Sc., Honours - Queen's University, Kingston, ON, Canada**
Biomedical Computing
- Developed computational models for diagnosing prostate cancer.

Contributions

2008-2019 — Published eighteen peer-reviewed scientific papers.
2019- — Member and Play Director for the Toronto Gay Hockey Association (TGHA).
2010-2021 — Two international conference oral presentations, eight posters.
2016-2019 — Scientific peer-reviewer (*Genome Biol*, *Mol Oncol*, *Brief Bioinform*).

Awards & Honours

2017 — Top peer-reviewed publication of the year (Oslo University Hospital).
2010-2013 — Breast cancer research doctoral fellowship (US Department of Defense).
2006-2008 — Postgraduate master's scholarship (NSERC).
2002-2006 — Dean's honour list, four years in a row (Queen's University).
2002 — Governor General's Academic Medal (Governor General of Canada).