Chris Salahub

chris.salahub@uwaterloo.ca | chris-salahub | Salahub | @Salahub

Summary

Technical Skills: Simulation, Data Visualization, Dimension Reduction, Regression, Prediction, Inference, Text Mining

Programming Languages: R, Python, SQL, Bash, MATLAB, C++

Domain Knowledge: Classification and Regression Trees, Measuring Association, Data Science, Exploratory Data Analysis

Education

Ph.D. in Statistics, University of Waterloo — Waterloo, ON, Canada
Scholarship: Alexander Graham Bell Doctoral Scholarship ($105,000 over 36 months) — May 2019 – Present
Thesis: *Explorations in Pairwise Measures of Association and Pooled Significance*
Supervisor: Dr. Wayne Oldford

M.Sc. in Statistics, ETH Zürich — Zürich, Switzerland
Scholarship: ESOP Scholar ($48,000 for being in the top 2-3% of incoming ETH Masters Students) — Sept. 2017 – Mar. 2019
Thesis: *Seen to Be Done: A Graphical Analysis of Peremptory Challenge*
Supervisor: Prof. Dr. Marloes Maathuis

B.Math. in Statistics (Dean's Honours List), University of Waterloo — Waterloo, ON, Canada
Thesis: *About "her emails"* — Sept. 2013 – June 2017

Professional Experience

Measurement Data Scientist — Toronto, ON, Canada
Vividata — Aug. 2020 – Jan. 2022
Clustering: Pioneered a new segmentation of demographic data using multiple correspondence analysis
Data pipelines: Integrated SQL and R seamlessly to produce daily survey and click stream data reports
Survival analysis: Used Cox regression to predict panel attrition and virtually eliminate over-recruitment

Lecturer (Data Visualization) — Waterloo, ON, Canada
University of Waterloo — Sept. 2021 – Jan. 2022
Organization: Taught 80+ students and directed a team of 4+ teaching assistants
Data visualization: Presented topics including dimension reduction, spatial statistics, interactive graphics, and programming in R

Data Development Intern — Toronto, ON, Canada
Environics Analytics — May 2017 – Aug. 2017
Algorithm development: Reduced convergence time of a demographic microsimulation by more than 90% using a Markov Chain model

Research and Development Intern — Toronto, ON, Canada
Environics Analytics — May 2016 – Aug. 2016
Modelling: Conceived a stochastic model to solve a network flow problem which improved the fit of simulated data to observed data by 50% when implemented in R and MATLAB

Select Publications and Presentations

Chris Salahub and Jeffrey Uhlmann. *Optimal Structured Matrix Approximation for Robustness to Incomplete Biosequence Data*. Submitted to IEEE Transactions on Computational Biology and Bioinformatics March 2023 (under review)

Chris Salahub. *Racial bias in jury selection*. Significance, 20(2):16-20. April 2023.

Christopher Salahub. *A Statistician's Introduction to Genomics*. SSC Annual Meeting. June 2021

Christopher Salahub. *String Manipulation in R*. Guest lecture for University of Waterloo STAT 847: Exploratory Data Analysis. Virtual. April 2021.

David Castells-Graells, Christopher Salahub, and Evangelos Pournaras. *On cycling risk and discomfort: urban safety mapping and bike route recommendations*. Computing. December 2019

Chris Salahub. *Another AI Prediction Piece*. DataDrivenInvestor. October 2018.

Christopher Salahub and R. Wayne Oldford. *About "her emails"*. Significance, 15(3):34-37. June 2018.