Ernani **Hazbolatow**

Quantitative | Previously Data Scientist and Election Forecaster.

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• Amsterdam, The Netherlands





TECHNICAL STACK

Programming Languages Mathematical Toolkit

R, Python, C++ through Rcpp, SQL

Frameworks and Libraries Pytorch, Tensorflow, scikit-learn, H2O, EigenRcpp, SHAP, CatBoost/LightGBM/XGBoost



PROFESSIONAL EXPERIENCE

Present Day November 2022

Junior Data Scientist to Medior Data Scientist, IPSOS I&O NETHERLANDS,

- > Performed data analyses and provided analytics for a variety of commercial projects across Ipsos service lines. A variety of tools and methods were used to do to these analyses.
- > Responsible for several R&D lines, like IpsosDiscover, SHAP and FastShapely/FastRWA. Researched and implemented these new analyses and methods within Ipsos in R, C++ and Python
- > Assisted the Public Affairs division with their polling activities for EenVandaag/Nieuwsuur and NOS. Responsible for migration (to R, SQL and where applicable, Python) and further development of the Exitpoll model.
- > Member of the Ipsos' Western Europe Marketing Science Community and Ipsos' Pollster forum. Host of Data Science Discussions, a biweekly book club with the aim of learning about new, state-of-the-art data science topics, with 20 other data scientists/specialists.

R C++ through Rcpp Python SQL SPSS Excel



EDUCATION

2018-2022 Bachelor in Psychological Methods and Data Science, Tilburg University

- > Graduated Cum laude with a GPA of 8.23 (Top >5%) and 186 out of 180 ECTS.
- > Thesis was supervised by Dr. Robbie van Aert on "Estimating Statistical Power in Categorical Moderator Tests for Meta-Analyses".
- > Minor consisted of multiple courses focused on mathematics, programming and statistics across various faculties at Tilburg University.

HIGHLIGHTED PROJECTS

- > FastRWA, FastShapely | State-of-the-art implementations and further optimization of Relative Weights Analysis and Shapely Value Regression in C++ from base R. This is the fastest Shapely Value Regression implementation, compared to in-house and CRAN libraries.
- > IpsosDiscover | Developing and implementing a state-of-the-art algorithm to find causal structure from observational ordinal categorical data. This algorithm is largely built off a simple score-andsearch learning algorithm, enhanced with Bayesian inference to battle high multicollinearity among variables.
- > Audio Denoiser and Upscaler | Deep Learning Project for Introduction to Deep Learning. Uses a deep CNN for denoising, whereas upsampling is done by an encoder-decoder architecture for 1D time series.



POLLING

In my role as data scientist at Ipsos I&O Netherlands, I am one of few pollsters responsible for polling activities at Ipsos I&O. Next to co-organizing the polls, I investigate possible improvements to current modelling strategies.

- > Exitpoll for the 2024 European Union parliamentary election in the Netherlands on behalf of the Dutch Broadcasting Network (NOS).
- > Exitpoll for the 2023 Dutch General Election on behalf of the Dutch Broadcasting Network (NOS) and RTL Nieuws.
 - ☑ Evaluation ☑ Television Broadcast
- > Polling for EenVandaag in the run-up to 2023 Dutch General Election
 - ☑ Deliverable
- > Exitpoll for the 2023 Dutch Provincial Election on behalf of the Dutch Broadcasting Network (NOS) Evaluation