HANA ŠEVČÍKOVÁ

Senior Research Scientist
University of Washington Center for Statistics and Social Sciences.

Data Scientist
Puget Sound Regional Council.

EDUCATION

Post-Doctor in University of Washington Statistics Department
Ph.D. in Statistics at Helmut-Schmidt University, Hamburg
Master in Computer Science at University Hamburg

RESEARCH WORK

Dr. Ševčíková has been involved in projects about population projection of **life expectancy** for all countries, of **sub-national fertility rate** and with **migration uncertainty**, and projects of building **land-use forecasting** model for the Puget Sound Regional council. Her knowledge on computational statistics and programming skill has also helped her group to implement their statistical methodology into software and R packages. She has published on CRAN with R packages of **population projection**, **mortality projection**, and **snow package**, which have become part of R core package parallel.

BAYES'S PROBABILISTIC

Hana is one of the first statisticians to start exploring demographic statistics. Since the publication of her and Prof. Raftery's first paper on population prediction "Bayesian Probabilistic Population Projections for All Countries" in 2012, she has been studying in this area for eight years. In her words, statistical demography is a novel but alluring area for a statistician. The dynamic demographic model developed by her and her team has been widely accepted in that field. Compared with traditional population projection model, their new model takes into account the impact of life expectancy on mortality, uncertainty brought by migration, and measurement error in data.
United Nations' official population projection in 2015 was based in part on their methods. Since then, Hana and her team began to cooperate with the UN in optimizing projection model and developing R packages.

MOMENTS IN THE PROCESS

During the research process, not everything went smoothly. At the beginning, she and her group planned to build a complicated model on sub-national population projection, an inclusive model that takes as many external factors as possible. However, in many sample evaluations, it turned out that sophisticated model didn't even work as well as simple scaling models.
After long-term of re-inspection and discretion in such cases, they finally ended up using simple model.

BESIDES BEING A SCIENTIST

Although she has great workload due to working as scientist at two places on completely different projects, Hana can always maintain the balance between work and life. She loves camping, hiking, and playing sports such as ping-pong, pickle ball. Hana loves her dog. Playtime with the pet always helps her alleviate the stress of busy workday.

ADVICE FOR STUDENTS

Insist on what you like, and always try different thins. Find out your interest of study, it is blissful to spend everyday working in areas that you like.