

# MICHAEL SEO

## PhD Student in Biostatistics

@ swj8874@gmail.com   mikejseo.github.io   in www.linkedin.com/in/mikejseo/   https://github.com/mikejseo

## EXPERIENCE

### PhD Student in Biostatistics

**Institute of Social and Preventive Medicine, University of bern**

📅 2019 – Present   📍 Bern, Switzerland

- Developed models that combine individual patient data from randomized controlled trials and non-randomized studies when aiming to predict outcomes for a set of competing medical interventions.
- Compared in simulations the standard approach to individual patient data meta-analysis (linear mixed effects model with random effects on treatment and treatment-covariate interactions included) with five regression methods that perform shrinkage.

### Biostatistician

**LLX Solutions**

📅 2018 - 2019   📍 Waltham, MA

- Drafted statistical analysis plans which address study designs and methodologies on how to evaluate efficacy and safety of the new drug in development.
- Extensively used SAS DATA Step and PROC SQL to transform raw clinical data into datasets that meet FDA standards.

### Research Associate

**Center for Evidence Synthesis in Health, Brown University**

📅 2015 - 2018   📍 Providence, RI

- Developed an R package for Bayesian network meta-analysis which allows simulataneous comparison of multiple treatments.
- Developed a statistical tool to analyze single patient (N of 1) trial and applied it to determine the effectiveness of carbohydrate diet for patients with inflammatory bowel disease.

### Quantitative Analyst

**In4mation Insights**

📅 2015 Summer   📍 Boston, MA

- Analyzed the intent and behavior questionnaires from Altria and developed a ranking system for their e-vapor products.

### Research Assistant

**Department of Statistics, Stanford University**

📅 2014 - 2015   📍 Stanford, CA

- Developed a Shiny-based web interface to the Statistical Analysis of Microarrays (SAM) and Prediction Analysis of Microarrays (PAM) R packages

## EDUCATION

### Ph.D. Biostatistics

**University of Bern**

📅 2019 - 2022   📍 Bern, Switzerland

### M.S. Statistics

**Stanford University**

📅 2012 - 2014   📍 Stanford, CA

- GPA: 3.7/4.0

### B.S. Statistics

**Duke University**

📅 2007 - 2011   📍 Durham, NC

- GPA: 3.7/4.0
- Graduation with High Distinction

## PROGRAMMING

R

Python

SQL

SAS

C++

Java

LaTeX

## STATISTICS

Bayesian Methods

Machine Learning

Meta Analysis

Multilevel Modelling

Causal Inference

## LANGUAGES

Korean

English

●●●●●

●●●●●

## CITIZENSHIP

USA