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## Professional Profile

Analytical professional with profundity in mathematical/statistical modeling and hands-on experience in analytical platforms(SAS/R). Strong sense of detail and organization. Great interpersonal sensitivity. Extensive knowledge in SAS/Base and intermediate SAS/Advanced programming. Profound knowledge in R. Huge interest in data Analytics and how it can help us make better decisions

## Experience

08/2015 – Now

### Biostatistician

#### *Data Management*

Cohort study on the characteristics of patients referred to a diagnostic course, to validate the presence of cancer before, during and after the end of the course. The objective was to provide a comprehensive dataset with one row per patient from datasets with multiple observations per patient. The data population was taken from National patient register(LPR) and consist of patient referred to a diagnostic course(Pakkeforløb) between March 2012 to April 2016. Course was created using the referral code, start and end codes, as well as a course identifier to number the total number of courses per patient.

#### Responsibility:

- Attended meeting on project planning and timeline.
- Prepare new datasets from raw data files using import techniques.
- Modify datasets using data steps, set, merge, sort, update, functions and conditional statements.
- Process data using Do loop and SAS array.
- Used defensive programming techniques for data wrangling.
- Analysed data using SAS statistical procedures such as proc means, proc Tabulate, Proc Freq, Proc summary, and proc univariate to generate descriptive statistics.
- Outputted customized reports using data \_NULL\_ and proc report techniques.
- Profoundly use SAS/ODS for generating different format output.
- Used SAS macro to improve the efficiency of SAS programs.
- Knowledge of FDA, EMA and CDISC SDTM and ADaM models

#### *ForløbsKoordination:*

A project on the effective management and distribution of health care and financial assistance as well as other social support to the right recipient in order to reduce cost as well as improving patients outcomes. A test of association was done in SAS to develop a solution on resource distribution and allocation.

#### Responsibility:

- Used SAS Enterprise guide graphic user interface to import excel workbook.
- Used data steps, proc sort, proc means, proc content and control statements to wrangle the datasets.
- Used proc freq to test for association between the two suggestions given by the case manager.
- Used proc format to create sex variables.

### *Study on Type1 Diabetise control drug.*

A randomise placebo/control, larigitude study on the efficacy of larigitude treatment to patient with type 1 diabetise. Th drugs where tested after inducing insulin to validate hypoglycemia associated changes for separate visits. Used linear mixed effect model to compare the effect of different treatments with repeated measurement.

#### Responsibility:

- Attend team meeting with leader to produce statistical analyse plan
- Calculation of discriptive statistics for baseline characteristics variables.
- Use independent ttest to validate between groups effects.
- Use two sample ttest to validate within group effects.
- Apply linear mixed effect model to fit the data
- Rebut models diagnostic analyses by validating the model assumption.

### *Inpatient out Patient Mortality Rate*

A study on the relationship between Patient Turn over, bed occupancy to Inpatient and 30days Mortality rate in Danish hospitals. Sensitivity analyses was carry out to create categorical variables for bed occupancy and patient turnover for deaths within admission and 30days after admission. Bed occupancy and patient turnover for the first 24hrs was used for the analyses. The finding show great correlation between bed occupancy, patient turn over to Mortality rate.

#### Responsibility:

- Extensively use R dplyr package to group and summarise the bed occupancy rate, patient turnover and incidence rate to have a descriptive view of the total number of deaths at various levels of bed occupancy and patient turn over rates.
- Subset the data to contain only deaths resulting from heart related diseases(AMI) and analyse the relationship to bed occupancy and patient turnover.
- Subset the data to contain only deaths resulting from pneumonia and analyse the relationship to bed occupancy and patient turnover.
- Apply genralised linear model with poisson extension to models the effect of patient turnover, bed occupancy, admission during odds working hrs and holidays periods to mortality rate.

### *SkadeStuen(Emergency Room)*

A weekly consultation statistical room where statistical advice is provided to medical researcher and R&D personals. Provide both programming and statistical inpute to researchers at Hvidovre Hospital.

#### Responsibility:

- Join tutoring of statistical prgramming languages - SAS and R for scientist with no prior knowledge.
- Provide statistical support to experimental and clinical studies and dialoge with scientist on how to design the study.
- Provide technical advice on statistical analyse plan.
- Advise on variables to be included in the models – Spearman's correlation coefficient, casuality test /Path Analyses/Structural modeling to the response variable.
- Advise on robust Model diagnostic in linear modeling.

- Did power analyses and sample size calculation on some of the project.
- Meta- Analyses – To assess the efficacy of results of a pooled of similar studies.
- Forestplot – graphical representation of meta- analyses.

01/12/2012 - 31/08/2015

### **Quantitative Analyse /Emerging Invest**

- Attend meeting on project analyses and ad hoc discussions on various investment incentives to clients.
- real option analyses: drawing from the idea of financial option to make future investment decisions
- Management of a pooled of securities containing FX and insurance linked products
- Generate new ideas and I develop pragmatic solutions for clients, applying the best practices in pricing and risk management.
- Advise clients from Emerging markets across Africa on the state of their various economic outlook, governance, investment opportunities by applying techniques like cluster analyses, principal component analyses and regression techniques to transform data obtained from the open source data base – Quandl to valuable assets for advisory purpose.

### **EDUCATION**

Master of Science, Applied Mathematics Malardalen University, Vasteras, Sweden.

Concentration: Financial Engineering.

Academic Degree: Diploma with honor in Applied Mathematics

Obtained June 6 2008

Bachelor of Science, Applied Mathematics Malardalen University, Vasteras, Sweden.

Concentration: Financial Engineering.

Academic Degree: Diploma with honor in Applied Mathematics

Obtained June 26 2007

Bachelor of Social Science, Economics Malardalen University, Vasteras Sweden.

Concentration: Financial Economics.

Academic Degree: Pass

Obtained June 4 2008

### **Theses**

- Bachelor Thesis In Applied Mathematics, Build a Java GUI (graphic user interface) to price American option using Berglund and Stensland Model (Knockout Model) .
- Bachelor Thesis in Economics, Theoretical and empirical analysis of the validity of efficient market hypothesis(EMH), the validity of using forward exchange rate to predict future spot exchange rate.
- Master Thesis In Applied Mathematics, Build a Java GUI to price variable annuity with a guarantee minimum withdrawal benefit. Modeling decision under uncertainty - explicitly work with HJB equation, dynamic programming and applying the principle of financial option analyses to real option analyses to optimally decide on when to and when not to invest in any given project.

**Programming Languages:** SAS, R, Python, Java, Matlab, SPSS.

**Languages:** English(Working proficiency), Danish(Intermediate)

**Courses: Now -**

Data Management for Clinical Research  
Design and Interpretation of Clinical Trials  
Case Studies in Personalized Medicine  
Clinical Epidemiology

Vanderbilt University USA Off campus  
Johns Hopkins University USA Off Campus  
Vanderbilt University USA Off Campus  
Utrecht University Netherland Off Campus