ACTLab STUDENT PROJECT

Dietary Behaviour Assessment

Assessing the relationship of health with overall diet rather than with single nutrients, foods, or food groups has intuitive appeal. Free-living people eat combinations of foods containing a mix of nutrients and non-nutrients. Dietary patterns (multidimensional dietary components operationalized as a single exposure) in relation to a health outcome can be modeled by statistics based data-driven methods. Usually more of some of foods/habits means that less of other foods/habits is being consumed/adopted. In dietary interventions that advocate an increase or decrease of particular foods or nutrients, change in one dietary component is usually accompanied by compensatory changes in other components of the diet. An unsolved problem is how to map the subject actual behaviour against some expected reference in time. A systematic health-score based assessment of the user behaviour is needed. The final goal would be addressing the most relevant question, "Is the user dieting as prescribed?". Further, affection variables on diet, could be identified and targeted for intervention. A data-set of daily life recording is provided.

Project type	MSc Thesis, MSc Seminar
Starting date	Summer semester 2016
Work distribution	65% theory, 35% programming
Useful knowledge	Machine Learning, Python
Contact at ACTLab	Giovanni Schiboni, giovanni.schiboni@uni-passau.de, ITZ 106