

AI-Assisted Coding of Food & Beverage Items in Dietary Records

We invite applications for an internship or master thesis within a cross-disciplinary project between the Department of Social and Preventive Medicine (Center for Public Health) and the Institute of Artificial Intelligence (Center for Medical Data Science) at the Medical University of Vienna. The intern or master student will support development, integration, and evaluation of AI-assisted classification methods to map food and beverage items from dietary records within the [COPLANT study](#) to standardized classification systems including [Nova](#), [Siga](#), [Nutri-Score](#), and [FoodEx2](#).

Project scope and relevance

This project focuses on the intersection of AI-assisted classification methods and dietary assessment, aiming to improve data interoperability and quality in nutritional epidemiology. Outcomes will support research reproducibility, enable linkage with clinical and population health datasets, and may inform decision-support tools for diet-related health research.

Key responsibilities

- Preprocess and normalize free-text dietary record entries and map to terminologies such as FoodEx2 coding.
- Design and implement methods for automated mapping to NOVA, Siga, and Nutri-Score where applicable.
- Integrate classification outputs into interoperable data models and document metadata and provenance for each mapping.
- Validate automated mappings against human-coded reference data and compute evaluation metrics.
- Prepare reproducible code, unit tests, and technical documentation suitable for clinical-research settings.
- Contribute to project meetings and dissemination (presentations, project reports, potential co-authorship).

Learning outcomes

- Applied experience with health data standards and terminologies, and understanding of nutrition classification systems.
- Interdisciplinary collaboration with clinicians, nutrition scientists, and AI engineers.

Preferred qualifications

- Enrollment in an MSc program in Medical Informatics, Biomedical Informatics, Health Informatics, Computer Science with health focus, or related field.
- Relevant technical skills: basic Python, experience with NLP/text classification, familiarity with data validation

Details

- Duration: 3–6 months (flexible).
- Time commitment: part-time (approx. 20 hrs/week) or full-time (negotiable).
- Location: university campus with hybrid/remote options.
- Compensation: course credit (please specify if available).

Supervision: joint supervision by PI in Public Health Nutrition (Maria Wakolbinger) and a lead in Medical Informatics / AI department (Georg Dorffner).

Application instructions

Please submit a single PDF containing: brief cover letter (1 page) and a CV including a short technical statement listing relevant skills. Send applications to: maria.wakolbinger@meduniwien.ac.at with subject line “Medical Informatics Internship - AI Food Coding”.

Expected start date: as soon as possible