

TNT505e Machine Translation Post-Editing

Level: 5

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JAN

E-Learning: BLENDED - Learning is done MAINLY online using interactive study materials in Canvas. Students receive guidance and support from online instructors via discussion forums and emails. This is supplemented with SOME face-to-face sessions. If the course has an exam component, this will be administered on-campus.

Synopsis:

Machine translation post-editing (MTPE) is a special and popular use case for humans to work with an automated translation system. This course discusses fundamentals of modern machine translation (MT) technology and MT post-editing strategies from a human perspective. It first introduces the current situations of MT deployment, including user types, opportunities and challenges. Then it examines the technical aspects of MT, including the mathematical frameworks for three MT paradigms (rule-based, statistical and neural MT), automated MT evaluation metrics, quality estimation and automatic post-editing (APE). Throughout this course, students will build a connection between their existing experience with language and knowledge of MT, define a problem that is based on real-life MTPE scenarios, apply relevant methodologies covered in the course and design a study to address this problem. The coursework will be project-based so that students are able to prepare themselves for real-life MTPE implementation.

Topics:

- Machine Translation (MT) in the language industry
- Introduction to the MT
- MT Paradigms and MT tool practice
- Neural MT
- Machine Translation Quality Estimation (QE)
- Introduction to MT post-editing (MTPE)
- MT Editing Strategies
- MT Customisation in specific domains: Healthcare and life science
- MT Customisation in specific domains: Business and finance
- MT Customisation in specific domains: Law
- Human-in-the-loop MT workflow

Textbooks:

Brian Mossop; Isabelle Robert; Maarit Koponen: Translation Revision and Post-Editing: Industry Practice and Cognitive Processes (eText) 1st Routledge
ISBN-13: 9781000201574

Learning Outcome:

- Compare different types of MT engines
- Design workflow of human-aided machine translation
- Prioritise different tasks in MT post-editing
- Formulate an approach to the use of MT
- Predict MT output after pre-editing
- Appraise MT output
- Improve the efficiency of the current design and workflow

Assessment Strategies (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	TUTOR-MARKED ASSIGNMENT 1	50
Overall Examinable Components	ECA	50
Total		100