

LOOKING FOR A MAJOR?

Technical Knowledge vs. Broader Social Values in Computing Majors

AIM

Our goal is to understand which topics universities focus on to describe their majors and present their curricula on their websites, and consequently picture how computing could be perceived by prospective students.

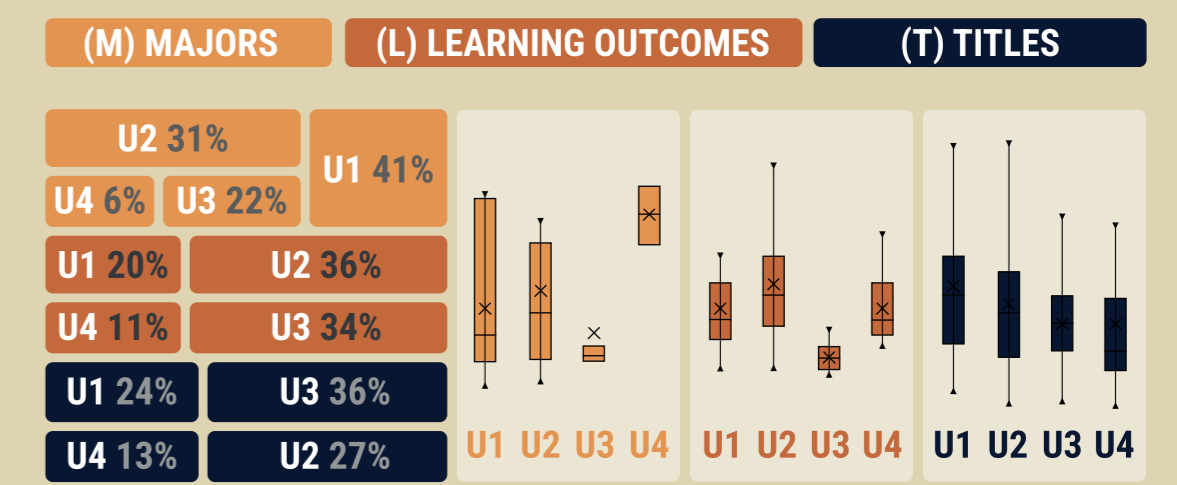
DATA COLLECTION

- 4 European universities
- 32 majors' descriptions
- 288 titles of courses and 232 learning outcomes' descriptions

DATA ANALYSIS

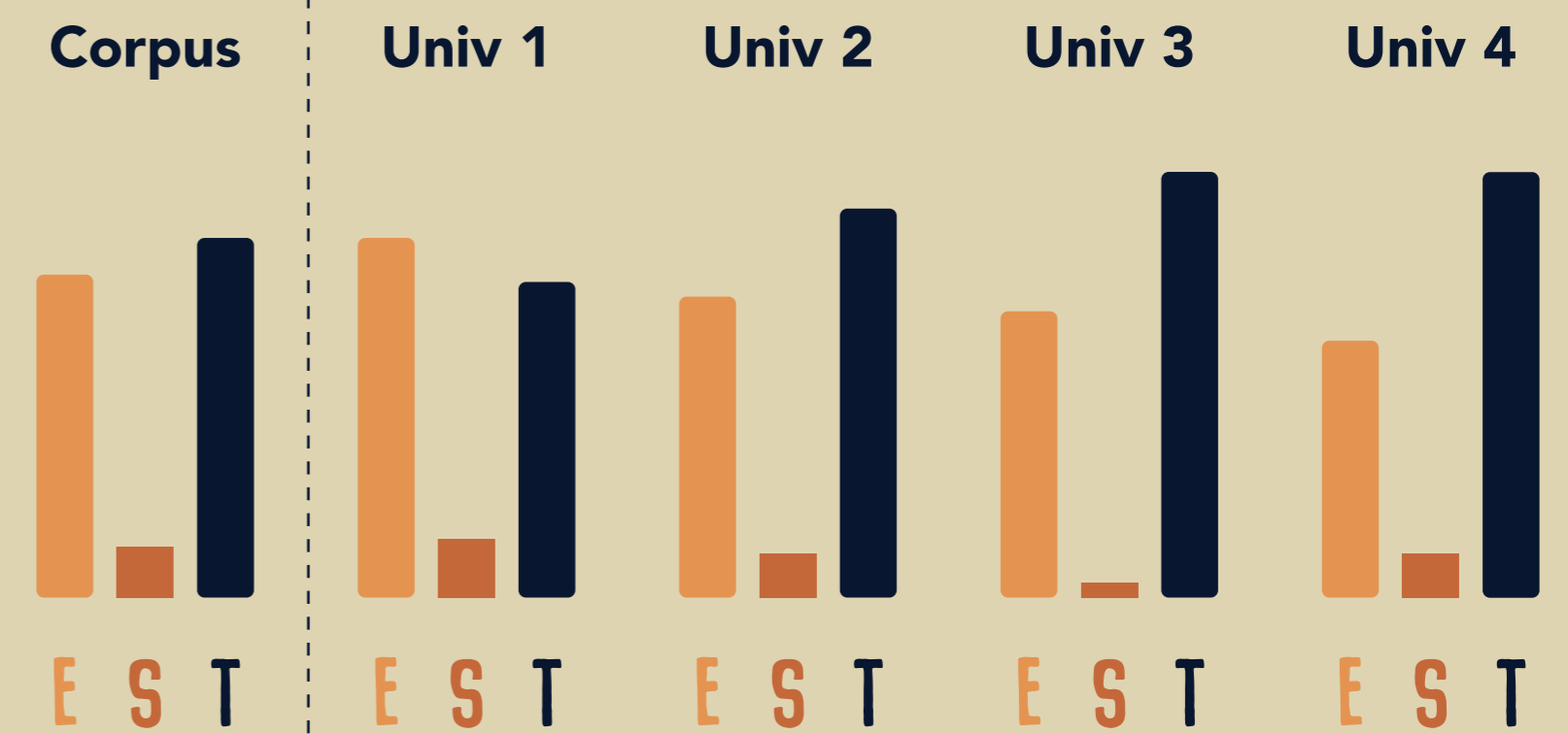
- 1 Text preprocessing
- 2 Computation of lemmas frequency and relative document frequency
- 3 Coding of lemmas into three categories: social, educational, technical

CORPUS COMPOSITION



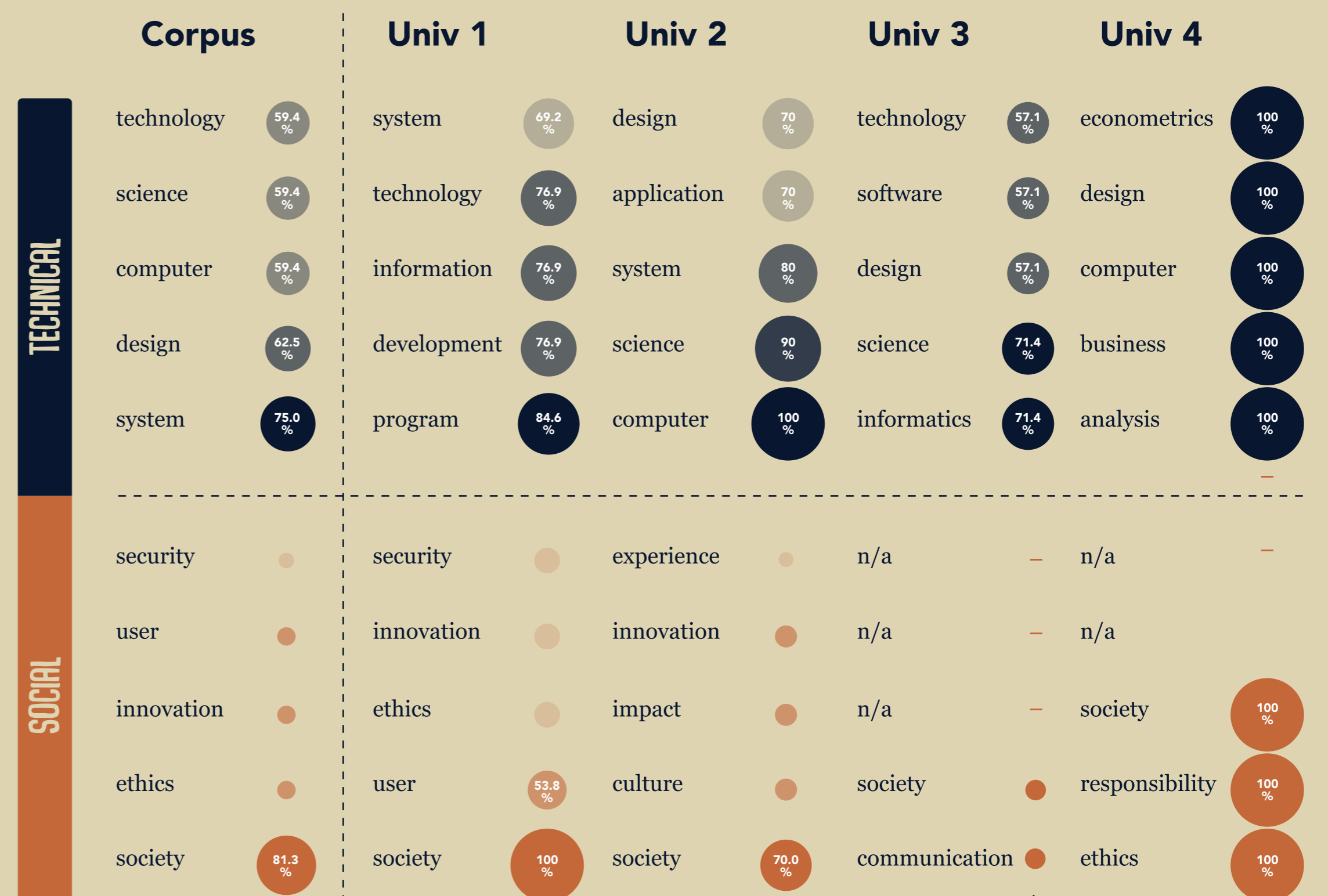
EDUCATIONAL LEMMAS SOCIAL LEMMAS TECHNICAL LEMMAS

FREQUENCY OF CATEGORIES



The universities observed were primarily concerned with the technical aspects of the field...

RELATIVE DOCUMENT FREQUENCY OF MOST COMMON LEMMAS (RDOCF)



SMALLER DOTS < 30%

... despite the fact that they recognized the social aspects of computing.

Because GenZ students are drawn to fields that allow them to contribute to society, it is critical that we look into how we present computing.

This exploratory study raises concerns that a lack of emphasis on computing's social implications may discourage students who want to work for the greater good.

