

B.Sc. Thesis: Telecommunications-Socio-Economic Big Data

Background

Telecommunications networks, especially modern mobile communication systems, have become an important part of our society. Relatively little is still understood the underlying socio-economical forces that constraint and drive the development of these networks. Developing better models to understand the scaling of different networks is important to make right engineering, economical, and regulatory decisions.

Tasks

In this thesis you will work in data analytics, the methodological area that is becoming very important in the time of big data, digitalization and machine learning. Your task is to use a big set of global data (from various different sources such as ITU, UN, operators, and governments) to build a large and coherent baseline dataset. You will then analyze this data using advanced statistics and data analytics methods to find out correlations, trends, and constraints.

Other Information

In this thesis topics you have an opportunity to work just like a data analysts would work in many companies or financial institutions. It is a good change to understand how different digital data can be analysed, and as the work is a part of our actual running TSC-Data Research Program, there is a very good probability that results from this work can be published in different scientific venues. Willingness to work diligently with scientific data and learn analysis methods is more important than the existing knowledge, but a capability to program and think mathematically certainly helps.



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