# Project Proposal - Scrappy Party

* **Research Title**
  + Analyzing trends of international collaboration in the Computer Science Department at IT University Copenhagen in the last X years
* **Research Question**
  + How has international collaboration in the Department of Computer Science at IT University Copenhagen developed over the last X years?
* **What is the motivation / background?**
  + We as international students interested in research want to uncover two major aspects within our research.
    - How did the collaboration partners and valuable partnerships of ITU change over time?
      * We came here for
        + High quality teaching
        + Good international connections and collaborations
        + We want to pursue a PhD afterwards
      * ITU states in its mission:
        + The mission of the IT University of Copenhagen is to deliver internationally leading teaching and research which enable Denmark to become exceptionally good at creating value with IT
        + Do they achieve this in terms of building international valuable partnerships? (if it increseas over time, we could agree with this)
    - Major events effecting research collaboration
      * We want to uncover if major events have had an effect on collaboration in research at ITU (e.g. Political events, laws, … more on it, in the next bullet point)
* **What is it that we do not know yet, that your dataset might help answer?**
  + Which political matters impacted collaboration? (Protectionist laws of Danish governments, Brexit, Russia's war in Ukraine, COVID-19 measures)
  + To what extent did the degree of internationalization changed in the publications over time? (we want to compare the ratio (%) of the national universities shared research output with the international universities in every year) Did research output with international collaboration increased in the last years or did it stop increasing and some point, and why?
* **What kind of data sources might you use? You should aim to integrate multiple sources and/or multiple types of data (for example images and text)**
  + We want to scrape the ITU webpage -<https://pure.itu.dk/en/organisations/computer-science/network-organisations/> in order to get the universities that ITU has shared research output with.
  + We need to map the Universities to the countries they are in
  + Further ideas:
    - Education Index of the countries, economical Index of the countries, etc.
    - Political Events, etc.
* **Potential challenges (both technical and societal/ethical)**
  + Java Script and scraping
  + Integrating a second data source
  + Integrating labeling
    - idea: weight the different publications based on their importance. E.g. Citation score (by doing a Scholar Google search> to a label, the place of publication ( journal, conference, …) - we can find this on ITU website> to a labeled score
  + We first need to have the data, then we know what events would be interesting to analyze, so we do not want to narrow us down to much on one specific topic, before gathering the data.