Computational Thinking and Data Science

- CT now widespread in K-12 education
  - Often data analytics is mentioned in connection with CT
  - However, most CT efforts focus on programming
    - Often in an imperative style – eg. Scratch or Python
    - Often focussed on robots or on screen simulations
  - Data analytics usually done declaratively
    - Spreadsheets, R, SQL, Scala, Spark/Hadoop, tensorflow
  - Thus there is a need for bridging the gap between imperative and declarative programming

  - Aim of this project is to develop a more declarative approach to CT
  - Starting point
    - Work done in the DFF project Popular Parallel Programming (P3)
      - extending the OpenSource spreadsheet FunCalc
    - 1st semester of DV – data analytics with spreadsheets (and Python)
    - 9th semester of DV – technologies for DV

  - Work started 1.9.2021
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