



Final-Year Project, 2009–2010
LTE Multiplexing and Channel Coding Implementation

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Aim

- Our aim in this project is to implement a prototype of turbo encoder/decoder and other blocks as specified in multiplexing and channel coding specifications of LTE PHY standards.

Main Tasks

- Reviewing literature and selecting the best turbo algorithm.
- Developing fast performance curves for this algorithm.
- Developing building blocks for other components in multiplexing and channel coding specifications of LTE PHY standards.
- Implementing fixed-point codes that are close to the corresponding floatingpoint codes.
- Developing an implementation on FPGA and/or DSP.