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SAW Filter Analysis Toolbox (SAWFAT): Structure, Organization, Algorithms, Examples

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Outline

1. What is SAW Filter Analysis Toolbox (SAWFAT)

- 1.1. Basic modeling assumptions
- 1.2. SAW filters to be analyzed
- 1.3. Toolbox analysis capabilities
- 1.4. Toolbox and modeling limitations
- 1.5. Computational algorithms
- 1.6. New version features

2. Toolbox Organization

- 2.1. Directory structure
- 2.2. File naming conventions
- 2.3. IDT-directory
 - 2.3.1. Computational subroutines
 - 2.3.2. M-script files and functions
- 2.4. GUI-directory
- 2.5. MSC-directory
 - 2.5.1. Computational subroutines
 - 2.5.2. M-script files and functions
- 2.6. EXAMPLES-directory
 - 2.6.1. SAW filter analysis
 - 2.6.2. MSC simulation

3. Building SAWFAT MEX-files

- 3.1. Fortran and C compilers
- 3.2. Step-by-step MEX-file generation guide
- 3.3. Troubleshooting

4. GUI Reference

- 4.1. GUI features
- 4.2. Control panel and elements
- 4.3. Data initialization
- 4.4. Quick start option

5. Tutorial Examples

- 5.1. List of tutorial examples
- 5.2. Data file format
- 5.3. Material constants
- 5.4. Tutorial examples limitations
- 5.5. Software development
- 5.6. Test results

6. SAWFAT Demonstration