Overview

Eric Jonas (jonas@eecs.berkeley.edu)

June 8, 2015

This is an experiment. I need your feedback to make sure it's working for you.

1 Background

Have you taken

A course on signals and systems A DSP course A stochastic process theory course A linear algebra course A differential equations course

Have you called fft in the past year

2 Introduction

The importance of consistent pedagogy -x(t) vs x[n]

The unimportance of formalism – this is a rapid survey (drinking from the firehose) and the formalism sometimes gets in the way. That said, if you wish to do actual work in this area, it's important to at least collaborate with someone who knows it.

3 About Me

I'm not a mathematician, or really even a computer scientist, but rather just a guy who wants to build cool shit.

4 What we don't cover

Only the tiniest bit of control theory no stochastic process theory no filter design No advanced modulation theory

5 Format

8 lectures heavy on background at first Lots of neat examples If you want supplemental material let me know

6 What I hope to achieve

1. Get people excited about these problems 2. in two years you remember enough keywords to intelligently google the right thing and not have the wikipedia page read like gibberish 3. Realize that computer science has been doing a lot of this stuff forever, and that you really do have the background and skills to contribute.