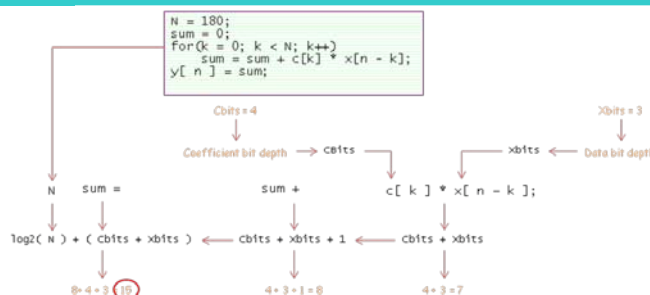# DSP Tuition

1-to-1 DSP tuition

Benefits

- 1-to-1 tuition to suit your schedule
- Based on BORES DSP classes
- Analyze DSP system requirements
- Understand filters and DFT
- Specify, design and apply DSP
- Implement DSP cost effectively

```
N = 180;
sum = 0;
for(k = 0; k < N; k++)
    sum = sum + c[k] * x[n - k];
y[ n ] = sum;
```

DSP Tuition

If you need to learn DSP but can't make it to one of our scheduled classes, then consider 1-to-1 tuition. Follow a rational, well organized program of learning and experiment but at dates and times that suit you.

Tuition aims

The aim of 1-to-1 tuition is to let you learn DSP in a practical way through discussion, demonstration and experiment. We have a comfortable seminar room and two well-equipped DSP workstations to support this.

Adapting to your interests

Tuition is based on our standard DSP classes, so we follow a well-planned learning program. I won't go beyond my range of teaching expertise but we can adapt the focus, topics and applications to your own experience and interests.

Accommodation

We can offer accommodation. See the accommodation website at:

www.fordwater-woking.co.uk

Available topics

Topics can be chosen from:

- Designing DSP specifications
- Frequency domain
- Sampling
- Discrete Fourier Transforms
- Filtering and FIR filter design

Signals and Noise

How to estimate, measure and analyze signal and noise characteristics to guide the required DSP specification.

- Signal and Noise
- Processing Gain
- Equivalent Noise Band Width

Frequency domain

Viewing DSP as operations in the frequency domain.

- Frequency domain analysis
- Window functions

Sampling

Sampling, its effects and the consequences for designing DSP systems.

- Sampling
- Aliasing
- Resolution

Sizing

How to specify DSP based on signal and noise characteristics and the application goal, and to estimate computational requirements.

- Filter length
- Arithmetic precision
- Computational complexity

Fourier Transforms

Understanding the DFT and FFT.

- DFT and FFT implementations
- DFT Figures of Merit

Filters

How to design, implement and analyze FIR filters.

- FIR filter applications
- FIR filter design

Target audience

This tuition is aimed at programmers. engineers and managers designing products which will use DSP, and who wish to fully understand and be able to apply the techniques of specifying, designing and implementing DSP systems.

Time and arrangements

1-to-1 tuition is arranged as necessary. For normal DSP classes check our schedule at: www.bores.com/index_schedule.htm

For accommodation see: www.fordwater-woking.co.uk

Booking and questions

Call us by phone or send an email to book or to ask questions:

- contact Dr Chris Bore
- mobile +44 7921 153219
- email: chris@bores.com

About Us

BORES Signal Processing train managers, engineers and programmers to understand and use DSP and streaming media processing.

- established 24 years
- excellent reputation
- worldwide activities
- • www.bores.com