

Our core expertise is in the areas of:

- DSP and image processing techniques
- SAR and related techniques
- Parallelism, including SMP (multithreading) and MIMD
- Software Engineering, especially in automated library and tools development

The company has two main activity areas: SAR and DSP. In addition, we provide more general technical consultancy services.

SAR and Remote Sensing

The company has particular expertise in Synthetic Aperture Radar (SAR) and related techniques. It has a broad range of experience covering image formation, despeckling and segmentation, image understanding and application-specific processing. Our work includes:

- SAR Image Formation techniques and software development
- SAR Image Understanding algorithms: research and development
- MTI and Tracking techniques and software
- Pilot implementations
- Code Productisation
- Software for applications of SAR

Major tools are InfoPACK our toolset providing what are acknowledged as the best available SAR image understanding facilities; SARMTI a new technique developed in-house, and providing greatly enhanced MTI capabilities directly from SAR data.

DSP and related library and tool development

We develop and market optimised DSP and related libraries: VSIPL, CSIPL, FFTW, and our library generating software Liberator. Our VSIPL libraries have been marketed for a number of years on PPC and MIPS platforms, usually under board vendor's logos; we reckon that around half of all advertised VSIPL libraries are ours under the skin.

General Consultancy

We also provide a general consultancy service to both small and large organisations. We carry out work in a wide range of areas, including:

Program development: we develop complete applications, or single procedures, to time and to budget, in C, C++, SQL, Fortran, HTML, or Java.

Code updating and restructuring : Existing applications with a long history need updating to use today's languages and structures. We have helped many times; we can provide secure and cost effective updates of your codes.

Code Conversion : Changing language? We will rewrite the code for you or with you.

GUI production : We produce front ends for our own software, and we can do the same for you.

Parallelism : We have worked with parallel systems, both SMP and clusters for over twenty years. We understand how to use parallelism, and we know the hardware and the software: SMP, threads, multitasking, message passing. We can help at all levels, from advice on architectures to the production of efficient and maintainable multiprocessor versions of your applications.

