



## Minutes of VSIP L Forum Meeting

August 21, 2001

Lockheed-Martin, Moorestown, NJ

### 1. ATTENDANCE

- James Lebak MIT LL [jlebak@ll.mit.edu](mailto:jlebak@ll.mit.edu)
- Gary Boudreaux MSTI [gary@mpi-softtech.com](mailto:gary@mpi-softtech.com)
- Rick Pancoast LM [rick.pancoast@lmco.com](mailto:rick.pancoast@lmco.com)
- Win Smith DNA Computing [wsmith@dna-cs.com](mailto:wsmith@dna-cs.com)
- Chris Robbins MCCI [crobbins@mcci-arl-va.com](mailto:crobbins@mcci-arl-va.com)
- Konrad Lee LM [konrad.r.lee@lmco.com](mailto:konrad.r.lee@lmco.com)
- Sharon Sacco SKY [sacco@skycomputers.com](mailto:sacco@skycomputers.com)
- Dan Cambell GTRI [dan.cambell@GTRI.gatech.edu](mailto:dan.cambell@GTRI.gatech.edu)
- Randall Judd SSC-SD [judd@spawar.navy.mil](mailto:judd@spawar.navy.mil)
- Stephen Prause CSP Inc. [sprause@cspi.com](mailto:sprause@cspi.com)

Gary Boudreaux volunteered to do minutes

### 2. NEXT MEETING

- Tentatively, Tuesday February 5, 2002 place TBD – San Diego was suggested
- May possibly move depending on other meetings – PCA or HPEC-SI

### 3. Action Items

#### 3.1 Randy Judd presents 1.1 draft & new functions

- Errata list
  - Pg. 525 cblockbind should be  $N$  not  $2*N$
  - Remove `#define NOHINT 0` and use `MEM_NONE`
- Revision History will be added after Notes to Implementors section
  - Grandfather previous revisions
- Randy mentions problems using 64-bit ( he defined `_vi` as `_f` )
- Gary Boudreaux discuss VSIP L/ERI – TASP implementation with FFTW, BLAS, and LAPACK function calls developed for Logicon Inc.

- Set FFT window (multiple also) (data taper -- t) not resolved for all cases ( $c_c$  and  $r_c$  OK)
  - Real window only for now. No window for 2D or 3D
- All new pages need review and comments to R. Judd
- SVD – new functionality to extract portion of the  $U$  or  $V$  matrix
- Keep a “wish list” on website for new functions to get more feedback from users as to which functions to add – e.g. eigenvalues (**ACTION: GTRI**)

### **3.2 I/O FUNCTIONS**

- Send editing and content comments to R. Judd
- Sharon would like all prototypes in the man pages -- would lead to two or three pages of prototypes for each function. The full prototype is not fully listed though.
- Agreed that the full prototypes should be expanded in the beginning section. (**Action:Judd**)
- Reviewed export, import, find, and size functions.
- Need to put an example in the beginning (under methodology) – James and Dan will address. (**ACTION: Lebak, Campbell**)

### **3.3 IMAGE PROCESSING – LEBAK**

- Question as to anyone who has time to do
- Need to decide on functionality – Judd suggests specific functions he needs – interpolation, re-size, image output for input to another image software (photoshop).
- Possibly look at GIMP or Matlab functionality,
- Find which routines used or needed by SAR people (many VSIPL users) – will begin to define functions.
- Need people to write a man page or prototype for I/O conversion from float to fixed-point.

### **3.4 HPEC-SI & C++ VSIPL**

- C++ good migration path to multi-processor VSIPL
- Scalability is one of the major goals of the effort.

### **3.5 USER'S GROUP –CAMPBELL**

- Funding is there – so meeting is a go for 2001
- Location is Georgia Tech campus – room on campus – TBD
- Need volunteer for Jamie Kenny's talk on interfacing with MPI, PAS etc. – Puri, Tony MPI

- Need volunteer for User Experience: porting expertise -- an actual user
- Backup for VSIPL functional content & profiles talk – possibly Sharon Sacco
- May need more time for James Lebak 10:00 Structure of VSIPL Programs – toy app
- Table and power for each vendor for demo or hardware requested.
- Talking with implementers, not vendors (emphasis on technical rather than sales questions) is important to users who will attend
- Vendor slides/poster on cd-rom and slide package -- vendors say yes
- Vendor display on second day only.
- Speakers and vendors pay – everybody pays !!
- Need dates and specific location, speakers, fee's, flyer, go no-go decision.
- Date selected as October 30<sup>th</sup> and 31<sup>st</sup>.