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### ***Highlights***

- 1. Over 30 years in real-time firmware, software, and algorithm development. Experienced programmer in C/C++, Matlab and signal processing.**
- 2. Significant experience in designing, developing, and fielding of computer systems.**
- 3. Rich combinations of practical software engineering expertise and in-depth theoretical knowledge.**
- 4. Certified CompTIA Security+ (career ID COMP001020699994).**

### **EDUCATION**

Ph.D. Geophysics, 1994, University of Houston, TX  
M.S. Geophysics, 1987, University of Houston, TX  
B.E. (Electrical Engineering, 1st Class Honors), 1976, University of Canterbury, New Zealand

### **Last 3 employments**

1. L-3 Communications, 2004-present.  
Sr. Principal Software Engineer.  
Radar/RF real-time airborne signal processing software.
2. Nortel Network, 2000-2004.  
Member of Scientific Staff.  
Mobile IP network servers.
3. mail.com, 1999-2000.  
Senior Software Developer.

### **AWARDED PATENTS - Inventor or co-inventor**

- [1] Methods and systems for detecting repetitive synchronized signal events, US Patent #8,433,739 (Apr. 30, 2013), by Stephen T. Ha.
- [2] Methods and systems for processing and displaying data, US Patent #8,438,203 (May 7, 2013), by Stephen T. Ha.
- [3] Methods and systems to discriminate between PSK and FSK signals, US Patent #8,275,073 (Sep. 25, 2012), by Stephen T. Ha, Michael L. Mahaffey, and Frank A. Boyle.
- [4] Method and computer program for identifying a transition in a phase-shift keying or frequency-shift keying signal, US Patent #8,149,975 (Apr. 3, 2012, A continuation patent of [5] below.), by Stephen T. Ha.
- [5] Method and computer program for identifying a transition in a phase-shift keying or frequency-shift keying signal, US Patent #7,590,209 (Sep. 15, 2009), by Stephen T. Ha.
- [6] Transducers to generate phase-encoded wavefields, US Patent #5,557,583 (Sep. 17, 1996), by Stephen T. Ha and Norman S. Neidell.
- [7] Combination fiber-optic/electrical conductor well-logging cable, US Patent # 5,495,547 (Feb. 27, 1996), by Saeed Rafie, Stephen T. Ha, et al.

## **REFEREED SCIENTIFIC PUBLICATIONS**

- [1] Ha,S.T.T., Zhou,H., Sheriff,R.E., and McDonald,J.A.,1996, Fourier transform approximations for sweeps and phase-encoded sweeps, *Geophysics*, 61, 1440-1452.
- [2] Ha,S.T.T., Zhou,H., Sheriff,R.E., and McDonald,J.A., 1995, Artificial generation of a directional phase-encoded wavefield, *IEEE Trans. Geoscience & Remote Sensing*, 33, 262-267
- [3] Ha,S.T.T., Zhou,H., and McDonald,J.A.,1995, Determination of reflector angular position using directional phase-encoded wavefield, *IEEE Trans. Geoscience & Remote Sensing*, 33, 15-25.
- [4] Ha,S.T.T., Sheriff,R.E. and Gardner,G.H.F.,1991, Instantaneous frequency, spectral centroid, and even wavelets: *Geophysical Research Letters*, 18, 1389-1392.
- [5] Ha,T.T.,1980, Further results on the pointwise controllability of Delay-differential systems: *IEEE Trans. Automat. Contr.*, AC-25, 981-983.