

## Resume - David R. Ahlgren

### Summary

David Ahlgren has 20 years experience as a high tech professional with engineering and business experience built on an extensive technical background. He has a track record of identifying new markets, creating product concepts and leading the teams that have brought advanced products to market. His experience includes embedded computing and hardware and software development focused on wireless communication and networking, software defined radios, sensors, signal processing and digital video compression. He is an expert on repurposing COTS equipment and technology for advanced applications.

### Recent Experience

#### **AhlTek Entrée Wireless LLC – President, 2001–2008**

Currently specializing in wireless and networking related technology development

- Focus on networking, wireless, security, sensors, VoIP and Digital Video projects.
- Expert on repurposing COTS equipment and technology for advanced applications.
- Recent FEMA Incident Command System (ICS) and National Incident Management System (NIMS) certification.
- CommNexus - Co-chair Emerging Wireless Group

#### *Recent Projects –*

- Phase I SBIR – Broadband mesh network for small Unmanned Aerial Vehicles (UAV). Responsible for concept through implementation. Advanced antenna, networking software and hardware design. Link budgets, power management, network configuration and management.
- Portable WiMax System – Product development. Responsible for concept through implementation. Link budgets, power management, network configuration and management.
- Tactical Communications System – Product development. Responsible for concept through implementation. Includes - dual redundant Internet connectivity (3G cellular and Iridium Satellite), long range Wi-Fi, Amateur radio, power management and packaging.
- Directional MANET Networking – Program manager for design DirecNet a very high speed software defined radio based transceiver for an airborne ad hoc mesh network system that utilized fast steering directional antennas.
- Wireless Networking – Design and specification of a large ‘4th-Utility’ wireless IP networks for broadband and VoIP distribution in commercial buildings. Industry technology trends seminar.
- Industry Consortium - Business development lead. Developed and implemented DirecNet a multi-company consortium dedicated to developing an open standard for Directional MANET networks.
- Homeland Defense – Business development for Virtual Agility a technology for rapid prototypes of Concepts of Operations (ConOps). Development of ConOps for bio-terrorism network.
- Digital Video – Product and business development for a start up company focused on mobile video security featuring handheld devices.
- 3G CDMA Wireless – Product development for a start up focused on mobile Wi-Fi products.

### Previous experience

- Management Fellow, UCSD CONNECT, Springboard Program - Mentored entrepreneurs in search of funding. Technologies; Wireless, Fiber Optics, Photonics, Medical Instruments.
- Business Development Manager, Wind River Inc. - Developer of systems, hardware and software. Technologies; networking, digital video, wireless and telecommunication, photonics, sensor networks embedded software and hardware.
- CEO, CTO ASTAR Inc. – Invented and brought to market a variety of digital-video based systems including interactive multimedia sports instruction products.

- CEO, VP Engineering, Telephoto Inc. – Invented and brought to market the first digital video compression subsystem for PC market.
- CTO, Sorrento Valley Associates - Developed mini and micro computer hardware, embedded and high level software, display and communication systems for companies serving medical, scientific, industrial and communications industries.

### **Education**

BS Electrical Engineering - Northeastern University, Boston, Massachusetts.

CDMA Internetworking - UCSD, CDMA 2000 Americas Congress

BIOTECH 101 - BioCom, BIO Lab Automation - ALA

Professional Engineer, Control Systems - State of California.

### **Publications**

Compression of Digitized Images for Transmission and Storage, SPIE.

Compression of Digitized Images using Graphics Signal Processors, SPIE.

Implementing International Standards for Still Frame Image Compression, SPIE.

Applying Compression to Real World Image Management Systems, ANSI JPEG.

### **Associations**

AFCEA, NDIA, CommNexus – Co-chair, Emerging Wireless