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## Summary

Senior Executive with a track record of bringing products to market on time on budget. Great cross functional team skills using agile, Kanban, six sigma techniques as appropriate. I have built a successful company from the ground up; using skills in negotiating contracts, partnerships, raising VC funds, and doing an M&A. Successfully brought several consumers based products to market, as well as B2B products. I enjoy working with customers, and translating the customers' requirements to the team. I have Strong IP skills both in prosecution and litigation with over 40 patents and patents pending.

## **Core Competencies**

I am good at simplifying complex systems; finding the minimal viable product; architecting software and hardware platforms; and working in an agile development environment. I believe in full product life cycle management.

## **Professional Career**

### Third Pole Theraputics April 2017-Present

Architect and principle engineer.

## FitSense Technology LLC (Present)

FitSense Technology LLC provides consulting services for startups and fortune 500 companies. Customers include: Under Armor, Jawbone, Angler Labs, Microsoft, Sole Power, Koko Fit, Knowbility, Humon, Shimmer and FitLinxx.

## FitLinxx 2007-2015 COO/CTO (post-merger with FitSense)

FitLinxx provided wireless hardware, wearable electronics and infrastructure for fitness clubs, employee wellness programs, and fitness enthusiasts.

At FitLinxx as COO I was responsible for merging the two corporate entities. I was able to reduce-product cost of the aging FitLinxx system by 50% and reduced operational costs by over \$150k per month. I was responsible for the outsourced manufacturing in China and the US. I was responsible for the IT infrastructure, our cloud delivery service, disaster recovery plans and was the chief security officer. As CTO I set provided new platform architectures and generated over 15 new patent applications and established a successful licensing program. I established FDA guidelines, HIPAA, privacy and security policy for the company. I was the industry liaison for consortiums and standard organizations (WLSA, CEA, HIMSS, IEEE and FitC).

## FitSense Technology 1997-2007 Founder/CEO

FitSense was founded to put the human body on line wirelessly. We made sensor data actionable by the user. FitSense developed systems and products for sale and license. I started the company in my basement and grew it to 24 people and \$4M in revenue. I raised VC funds. We had several successful consumer product launches and in 2007 we merged the company with FitLinxx Inc.

Consumer Products:

- FS-1 the worlds first speed distance and heart rate monitor connected to the cloud.
- Nike, (Nike+ Consumer Product),
- Reebok (Traxtar consumer product).

## Significant Contracts/Programs

- Welch/Allyn (Nightingale ECG Monitor),
- Motorola (MotoHealth Nextel based health monitors),
- Army/NASA (Warfighter Physiological Monitor, Mt. Everest Health Monitor, John Glenn/Space Shuttle Sleep study, copper miners in Australia),
- NBC 2000 (Monitoring Michael Johnson in Olympic Trials),
- **Discovery Channel** (Adventure Racing Series health and location monitoring system),
- WBZ Boston Marathon live broadcast tracking athletes HR/Speed/Distance/Caloric burn.

#### Bolt Beranek Newman 1982-1997

BBN was a world leader in innovative technologies, now owned by Raytheon. I was involved in many innovative programs at BBN exposed to sensor's systems, acoustic feedback systems, networking, supercomputing, mobile platforms and wearable.



## BBN Technologies, Advanced Networking Department Manager. 1991-1997

The advanced networking department performed new innovative network topologies and provided manufacturing and support services for most of BBN. I grew the department to 80 employees \$30M P&L. As department manager we were responsible for generating our own sales pipeline, managing our budgets and contracts.

## BBN Advanced Computers (Wholly owned subsidiary) Director of Operations 1986-1991 BBN

BBN ACI developed the world's fastest computer; the *Butterfly Parallel Processor*. I was the lead Systems Engineer responsible for the system design, manufacturing and support of one of the first large scale parallel processors in the world. I developed BBNs contract manufacturing relationships, support organization and maintained customer relationships post sales. I reported to the CEO of BBN Advanced Computers.

# BBN Computer Company Sr. Test Engineer 1982-1986

I was responsible for developing board, and system level diagnostics, networking test methodologies for all of BBN's commercial products.

**Education** 1981 BS Electrical Engineering and Computer Science University of New Hampshire (concentration in Biomedical and a minor in history).

Affiliations Member of IEEE, IEEE Personal Health Devices Standards group (IEEE 20601-11073), HIMSS, and ASCM, CEA Health and Fitness Standards Committee.

Natick Little League Natick Babe Ruth Baseball Coach 2003-2007

Awards: Continua significant contributor, IEEE Personal Health Devices Standards significant contributor, Best Presentation IEE Body worn networks.

#### **Publications and Patents**

- Weyand, P., Kelly, M., Darley, J., Oliver, S., Ohlenbusch, N., Joffe, S., Blackadar, T.and R. Hoyt. Ambulatory estimates of maximal aerobic power from foot-ground Contact times and heart rates in running humans. J. Appl. Physiol. 91: 451-8, 2001.
- Proceeding of the ATS, June 2004; Cumulative field monitoring of ambulation in COPD M. L. Moy, MD, MSc 1,2, T. Blackadar 3, S. J. Mentzer, MD 1,2 and J. J. Reilly, MD 1,2. 1 Brigham and Women s Hospital, Boston, MA; 2 Harvard Medical School, Boston, MA and 3 FitSense Technology Inc., Southborough, MA.
- Raymond SA, Blackadar T, Oueida W, Ohlenbusch NE. Preventing false spirometry values and invalid symptom scores in respiratory clinical trials. The Journal of Allergy and Clinical Immunology, Supplement Feb. 2004:113(2):S277
- Blackadar, T. Ambulatory Monitoring-Embeddable, Wearable "It's all about fashion", Studies in Wireless Electronics International Workshop on Wearable and Implantable Body Sensor Networks, IEE London, 79-81, 2005
- Proceedings 2003 Sages The Use of Wireless Monitoring Sensors for Bariatric Post-Operative Fitness Training James "Butch" Rosser, MD, Björn Herman, BA, Tom Blackadar, BSEE/CS
- The Physiologic Cipher: R. Satava, T. Blackadar Telemedicine on Everest GPS World October 2001, Volume 12, Number 10 Pages 20.
- IEEE 802.11-98/296, IEEE P802.11 Wireless LANs; MOBILE MEDICAL MONITORING September 8, 1998 Blackadar, T. Wronski, J.;
- Robert J. Aiken, Adam Abramski, John Bates, Thomas Blackadar. Middleware for Ubiquitous Computing. HUC'1999. pp.301~303
- Proceedings DARPA Wearables in 2005 July 18-19 1996 Arlington, VA
- Low Power Wearable Sensors 1997 Proceedings of the ACM/Siggraph Wearables Tutorial.
- BBN-DARPA Parallel Processing Quarterly Technical Reports 1984-1985 BFLY-QTR-05, BFLY-QTR-12
- Crowther, W. and Goodhue, J. and Starr, E. and Thomas, R. and Milliken, W. and Blackadar, T. Performance Measurements on a 128-Node {Butterfly} Parallel Processor", Proceedings IEEE ICPP. 1985, pages 531-540, 1985"
- IEEE/ISO 11073-10407 Blood Pressure Specialization standard.
- Rosser JC, Herman B, Blackadar T, Noyan EL. The Use of Wireless Physiological Monitoring Sensors for Bariatric Post-Operative Fitness Training, Society of American Gastrointestinal Endoscopic Surgeons (SAGES), Los Angelos, CA, 2003.

#### Conferences

Co-Chair, DARPA 1996 Workshop on Wearable Computing 2005

Marketing Chair Boeing 1996 Workshop on Wearable Computing

2004 Health Care Unbound Personal Sensing systems

2005 Health Care Unbound Mobile Clinical Trial Systems

2004 Wireless Life Science

2006 Health Care Unbound Technologies For Baby Boomers

2006 Summit on behavioral Telehealth: Technology for Behavior Change Keynote Address: Web Based Tools for Collecting Activity Data and changing Behavior

2007 Club Industry Corporate Fitness



### Issued Patents (there are 10 pending)

8,214,007 - Body Worn Physiological Sensor Device Having a Disposable Electrode Module

7,962,312 Monitoring activity of a user in locomotion on foot

7,937,121 Intelligent data network with power management capabilities

8,264,328 Sensor device with persistent low power beacon

7,768,415 Sensor device with persistent low power beacon

7,617,071 Monitoring activity of a user in locomotion on foot

7,466,979 Intelligent data network with power management capabilities

7,428,472 Monitoring activity of a user in locomotion on foot

7,428,471 Monitoring activity of a user in locomotion on foot

7,200,517 Monitoring activity of a user in locomotion on foot

7,187,924 Intelligent data network with power management capabilities

6,898,550 Monitoring activity of a user in locomotion on-foot

6,536,139 Detachable foot mount for electronic device

6,493,652 Monitoring activity of a user in locomotion on foot

6,357,147 Detachable foot mount for electronic device

6,336,365 Low-cost accelerometer

6,298,314 Detecting the starting and stopping of movement of a person on foot

6,122,340 Detachable foot mount for electronic device

6,052,654 Measuring foot contact time and foot loft time of a person in locomotion

6,018,705 Measuring foot contact time and foot loft time of a person in locomotion

