SHAWN M LEWIS

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OBJECTIVE

Seeking to build on my dynamic leadership skills with an established history of building innovative technology solutions combined with assembling and managing effective teams. Crafting ahead of schedule delivery and under budget operational expertise. Continuing industry leadership in multiple technical areas.

KEY COMPETENCE

Extensive R & D experience Solution Architecture Design Innovative Technology Solutions Project Planning & Implementation Strategic Technology Planning Contract Negotiations Project and Departmental Budgets Hands On Leadership
Team Building
Customer Solutions
Education and Training
Fiscal and Budget responsibility
"Outside of the Box" thinking
Intellectual Property Advancement

PROFESSIONAL EXPERIENCE

CHIEF ARCHITECT

06/15 - 06/16

Tencara Technologies, Inc

Orlando, FL

Architecting and implementing a programmable next generation SDN border security gateway for one of the world largest online game providers. Implemented software based solution utilizing DPDK capable of intrusion detection, DDOS prevention and dynamic packet processing in excess of 20Gbps traffic in a white box hardware solution under \$8,000 providing customer with a Capex reduction of over an estimated 80%. Hiring and managing a small team of developers to architect, develop and implement a full solution in under 12 months time. Worked directly with principles at organization developing requirements and implementation to specifications.

Architected and implemented split network architecture (packet processing/control) with high rate packet processing and TPS.

Cloud based capabilities allowing gateways to exist at edge and control to be deployed within localized and tiered data centers.

Provided open system architecture allowing for platform to be utilized as router, security, gateway, analytics and more with no additional CAPEX with an overall reduction from existing technology CAPEX estimated at 80%.

Platform developed from conception to delivery in under 12 months and under budget with minimal development team.

Incorporated multi tiered architecture with fully integrated web administration thru restful API to back end brokers for database and system control.

Development cost of entire platform was equated to the cost of single vendor device in the network handling less then 5% of the network traffic.

CHIEF ARCHITECT

Benu Networks, Inc

2013 to 2015

Lake Mary, FL

Recruited to build companies remote R&D office in Lake Mary, Fl to head the companies next generation product development. Building a team of 35+ engineering and other resources to architect, design and deliver the companies next generation product line while working with executives to advance the company to the next stage. Incorporating custom requirements, market demands, shifting technology changes and producing an integrated solution capable of both horizontal and vertical scale for the company to build upon. Implementation provided "same source" for both Hardware (Cavium Octeon 3) and Software based packet engines reducing companies need for 2 distinct software support teams. Increased companies intellectual property with filing over 6 patents related to companies core technology goals.

Built, trained and managed highly efficient network engineering team to develop dual "stack" codebase working on both Cavium and Intel product lines.

Utilizing latest technology accepted practices and open API's for $3^{\rm rd}$ party and billing interaction to platform.

Produced development requirements documents, planning, scrum objectives and budget requirements for R&D efforts of company.

Reported directly to CEO while working with executive piers successfully realigning company product lines and technology strengths for on going efforts.

Worked with customers, sales department and engineering staff for education and technology solutions for ne network requirements.

Enhanced companies intellectual property portfolio with the addition of multiple patents.

CONSULTANT 2011 to 2013
Benu Networks, Inc Concord, MA

Charged with architecting, enhancing and developing existing MEG400 product line for a new product offering for a Tier 1 cable provider. Working with customer to define next generation "Managed Home Networking" services on an existing Benu WIFI Access Gateway. Produced requirements, platform changes and new software development requirements to provide managed home networking for 100,000 homes per box. Implementing managed and dynamic service platform the control and operation for DHCP, local networking, DLNA, QoS as well as network services and management interfaces for Network Operations and Customer facing. Development and implementation became the stepping stone for the NGN solutions of the company.

Took tier 1 cable company "vision" and architected a NGN network service offering utilizing existing hardware product line thru the addition of new software products and changes in existing software on embedded Cavium hardware.

Built first completely virtual Home Network product offering without the requirement of dedicated routers in the home and configurable within the cloud.

Created and implemented virtual network services (DHCP, DLNA, and more) reducing the OPEX and CAPEX requirements of per home installations.

Worked directly with customer during initial phases of trial deployment.

Provided many new adaptable services thru "network eventing" on per use, per home triggers allowing for many advanced services to be deployed within weeks instead of months to years.

CONSULTANT 2009 to 2011
NokNok, LLC Orlando, FL

Tasked with architecting and implementing one of the first video streaming services for video media to Game Devices (Playstation, Xbox), DLNA Media Players and custom Mobile applications for Apple IOS and Android devices. Utilizing a cloud based infrastructure for media translation, transcoding and delivery combined with social networking to share media NokNok delivered realtime media from hundreds of online sources and myriad of formats.

Developed industries first cloud based DLNA service offering supporting 100's of media players

Cloud based transcoding and signaling mediation to endpoint devices

Social networking allowing users to share media amongst friends and family.

Custom Apple IOS and Android applications for mobile devices

CHIEF TECHNOLOGY OFFICER/CHIEF OPERATING OFFICER

2005 to 2008

VoIP, Inc

Altamonte Springs, FL

Remaining on with VoIP Inc following the acquisition of Caerus, Inc assuming the roles of both COO and CTO with continued responsibilities of Network Operations, Network Engineering and overall operations of VoIP Inc nationwide footprint servicing half of the Tier 1 telecommunications providers in the US. Provided forecasting, CLEC interconnections, backhaul operations, internal software and billing systems as well as increased network footprint and capacity 150% while reducing OPEX 22% over 3 years thru combined contractual negotiations and new technology internally developed. Interacting with shareholders, vendors and customers on a regular basis as well as providing numerous speaking engagements and telecommunications and technology.

Responsible for reducing OPEX expensed over 22% following acquisition thru contract renegotiations and new technology deployments in the network

Oversaw the Network Engineering (CLEC and IP Transports), Network Operations, Software Engineering and day to day operations of the company.

Enhanced company positioning thru numerous conference and speaking engagements nationwide related to technology as well telecommunications

Worked closely with executive team for budgets and shareholder reporting as well as forecasting and new business development.

CHIEF EXECUTIVE OFFICER/FOUNDER

2000 to 2005

Caerus, Inc

Altamonte Springs, FL

Sole founder of technology and telecommunication's company providing both competitive and advanced telecommunication services to top tier carriers and service providers. Responsible for growing company to over 140 employees, nationwide network with 13 state local interconnections utilizing 100% percent internally developed softswitch technology. Grew sales to over 3.4million per month with GPM exceeding 38%. Groomed company for merger/acquisition to VoIP Inc (publically traded) in 2005 valued over \$56 million dollars.

Initial 12 months of company built engineering and software development base to create custom telecommunications switching platform coincided with CLEC interconnection agreement negotiations in 21 states.

Interconnected switching platform in multiple states providing nationwide coverage for CLEC's, IXE's and service providers for basic and advanced telecommunications services

Partnered with Google and developed for and provided to, Google CLICK-TO-CALL trials nationwide. Partnered with Google and developed for and provided to, Google CLICK-TO-CALL trials nationwide.

Grew business to exceed 3.4million in gross monthly revenue's

CHIEF TECHNOLOGY OFFICER

1996 to 1998 Cambridge, MA

XCOM Technologies, Inc / Level 3 Communications

As co-founder of company responsible for raising initial funding from two Tier 1 venture firms for \$4 million dollars, responsible for patenting, developing and deploying very first softswitch technology worldwide. Responsible for the platform development, vendor negotiations, CLEC interconnections, network operation, forecasting with deployment into 4 states and interconnection agreements in 12 before being acquired by Level 3 Communications in a deal valued in excess of \$200 million producing one of the highest ROI's to date for investors in less than 18 months. Continued on with Level 3 Communication during transition process.

Multiple patents for Voice over IP and Softswitch technology

Architected, developed, deployed and interconnected first ever softswitch in United States

Worked closely with vendors of "DSP Modem" (Ascend, Shiva, etc) hardware to convert service provider modem based hardware into telecommunications interconnection equipment

Responsible for building and operating software development, engineering and all telecommunication operations

PATENTS

SYSTEM AND METHODS FOR PROVIDING VIRTUALIZED CLOUD PEERING EMULATION SERVICES (20160021684)

SYSTEM AND METHOD OF PROVIDING ADVANCED SERVICES IN A VIRTUAL CPE DEPLOYMENT (20150237667)

CLOUD-BASED VIRTUAL LOCAL NETWORKS (20140172947)

EXTENDING MULTICAST/BROADCAST SERVICES TO WIDE AREA NETWORKS (20140136660)

VOICE OVER DATA TELECOMMUNICATIONS NETWORK ARCHITECTURE (20080025295)

VOICE OVER DATA TELECOMMUNICATIONS NETWORK ARCHITECTURE (20080025294)

VOICE OVER DATA TELECOMMUNICATIONS NETWORK ARCHITECTURE (20080013531)

System and Method for Bypassing Data From Egress Facilities (20070201515)

TECHNOLOGY - Above Average to Expert

OPERATING SYSTEMS / PLATFORMS

- Windows (Vista, Windows 7,8 and 10, Server Versions, Mobile Devices Phone and Tablet)
- MAC OSX
- Apple IOS
- Android
- Linux (Redhat, CentOS)
- Embedded Platforms (Microlab, Arduino, and others)

PROGRAMMING LANGUAGES

- Desktop: C# (Mono/.Net Framework), C (Embedded and Application), Python, Limited C++
- Web: Javascript, HTML, HTML5, Limited CSS, Bootstrap, jQuery, Limited Java
- Mobile: IOS, Android, Windows Mobile
- Formats: XML, JSON, REST, SOAP

DATABASES

- Microsoft SQL-Server
- Mysql / MariaDB
- Firebird
- Postgres
- Redis
- Couchbase
- Memsql
- Memcache

PROTOCOLS

- Telecommunications: SS7, ISDN/Q.931, SIP, MEGACO
- Networking: Extensive Knowledge-> IP, UDP, TCP, Broadcast, Multicast, Ethernet, DiffServ
- Network Services: DHCP, ARP, DLNA, UPNP, Zeroconf, NetBios, AppleTalk
- Network Generic: HTTP, SMTP, DNS, SSL, RTP
- Routing: BGP variants, OSPF, Static

One year following sale of XCOM Technologies and exiting transition period from Level 3

One year after leaving VoIP, Inc

^{**} Two periods of "sit out"/non-compete in work history for period of 1 year each: