

Technical Co-founder - Cloudstrate - Boulder (May '13 - April '16)

Definition, design and implementation of Cloudstrate's "Cloud-in-a-box" on-premise service delivery platform.

Evangelized Cloudstrate's vision for Infrastructure as a Service, Internet of Things and Remote Virtualized IT services to investors, partners and customers.

Produced market, competitor & product positioning analyses, revenue & margin projections, CAPEX & OPEX models and strategic growth plans.

CTO / VP of Product Development - Presilient - Broomfield (Feb '04 – Jun '07 & Jan '10 - Dec '12)

Responsible for the growth and enhancement of Presilient's IaaS, Managed Backup, Storage Appliance and Remote Monitoring product portfolio through the identification and development of new technologies.

Formulated and developed segment specific offerings for new and existing verticals based on feedback from the sales organization as well as direct consultations with customers and partners.

Accelerated the release of new products and features by utilizing rapid prototypes, iterative development methodologies, service oriented architectures, cloud platforms, opensource software and commodity HW.

Successfully developed the OSS software suite for 24/7 storage operations center with over 2 Petabytes under management. Modeled customer, partner and vendor process flows and implemented email driven applications including trouble ticketing, failure notification and contract entitlement.

Enabled growth from 60k to 200k backup & recovery jobs/month with only marginal increases in staff workload.

Analytics Architect - Me.dium/OneRiot - Boulder (Jul '07 – Nov '08)

Built an event logging and clickstream analysis system for social networking startup. Deployed a highly scalable data collection and MySQL infrastructure that captured 100 million interactions from 35,000 unique visitors/day.

Designed database schemas, partitioning logic and fault tolerant ingestion mechanisms. Formulated SQL and ETL logic for mining user behavior, key service metrics, marketing campaign response rates, user experience and backend server performance.

Systems Architect - Sun Microsystems - Broomfield (Multiple Contracts, Sep '00 – Dec '03)

Architected the operational infrastructure and wide area network for Sun's remote monitoring service (SRS), scaling to 250,000 monitored hosts across six continents. Minimized the impact of scheduled and unscheduled downtime through the use of diverse telecomm provider connectivity, paired system/network elements, automated failover and dynamic routing.

Led Sun's eCommerce platform consolidation through the creation of a virtual hosting environment. Authored kernel modules, pseudo-device drivers and a system call interposition layer that enforced separation between multiple userland environments used for OS virtualization and application stacking.

Director, Network and Systems Engineering - Relera - Denver (Jan '01 – Dec '01)

Developed colocation, web hosting, media distribution and streaming video product offerings. Integrated streaming backend with multicast, layer 4-7 switching, content storage and bandwidth shaping.

Identified and resolved issues such as QOS, IP address architecture, transit & peering arrangements and the translation/incorporation of system logs into billable usage records.

Supported the company's sales and business development efforts by participating in client visits, road shows and industry events where significant engineering and operational expertise was required.

Sr. Manager, Network Facing Systems / Unix Architecture - Level 3 - Broomfield (May '98 – Sep '00)

Designed and implemented Level 3's Web Hosting and IP Co-location product offerings. Deployed network infrastructure, including bandwidth aggregation, monitoring & telemetry, SMTP Email Relay, DNS, and Radius across an initial fifteen data center facilities. Implemented Bandwidth Management and Metered Billing for the dedicated access and co-location products.

Supported a number of crucial initiatives by developing the technical strategies for Multicast, Caching, Streaming Content Distribution and Geographic Load Balancing. Analyzed cost, functionality and performance of several competing router and switch platforms.

Drove standardization efforts and realized support savings of over one million dollars per annum by organizing

Level 3's data center services into a utility model. This environment successfully decoupled application and infrastructure lifecycles, eliminated underutilized assets, consolidated development, test and production hardware and cut physical footprint in half.

Internet Security Engineer - Ball Corporate Telecomm - Boulder (Apr '96 – May '98)

Designed host and network security infrastructure for 60-site WAN with multiple paths to the Internet. Implemented commercial, public domain and locally developed firewall / IDS software arrayed across geographically distributed bastion hosts and perimeter networks.

Provided DMZ, content filtering, web caching, forward & reverse proxying, SMTP and HTTP services.

Led forensic investigations into attacks against corporate resources both internally and externally.

Software Engineer - NOAA Climate Diagnostics Center - Boulder (Apr '93 – Apr '96)

Authored graphical toolkit for the display and manipulation of time-series data for scientific research.

Coded FIR & IIR digital filters including Butterworth, Chebyshev, and Elliptic.

Performed pre-purchase evaluation and qualification of hardware, software and networking products for one of the first Internet accessible historical climate data stores.

Kernel & Network Tuning Guru: tweaked RAID stripe-widths, TCP/IP MSS's/MTU's, window/buffer sizes, UFS/NFS and database transactions, processor scheduling and memory interleave/allocation algorithms in order to obtain optimum performance and maximum utilization of computing assets.

Embedded Software Engineer - Kentek Information Systems - Boulder (Oct '89 – Apr '93)

Engineered, from design to manufacture, a number of digital electronic products, including:

Graphics rasterization and image processing platforms, video scan rate converters, print head and servomotor controllers, SCSI & Ethernet adapters and other high-speed serial & parallel interfaces.

Specified, designed and coded CAE software used for integrated circuit design.

Built design rule checkers for the pre-production verification of semi-custom and full-custom ASIC designs

Analysis of fan-in/fan-out, setup & hold, power dissipation and testability.