Jack D. Mills

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SUMMARY

>25 yrs conceiving and managing delivery of software/hardware systems and product lines

Experience Highlights	Products Shipped
Founder/CEO/CTO of cloud/web startups	Cloud and web applications and platforms
VP of R&D at datacenter services provider	Datacenter management frameworks
Intel	ERP SaaS applications
Director of Enterprise Platforms Research Lab	Compilers, JIT's, and virtual machines
Lead architect of the Itanium instruction	Performance simulation & system measurement

Manage functions across the entire product lifecycle: Concept, "Lean Startup" value prop discovery, user experience design, architecture, development, test, operation, and support

Managed single-site and geographically-distributed teams ranging in size from 3 to 200 people

Drive execution with: Repeatable, agile processes; crisply-defined, measurable goals; non-micro-managed attention to detail; directed learning; and vision for technology and market trends

Obsess over the user experience; seek and incorporate market feedback; pivot when necessary

Adept at identifying, challenging, and mentoring creative, aggressive, focused performers; fostering an egalitarian, people-centric work environment; believe in consciously constructing organizational culture

Inventor on 15+ patents

EXPERIENCE

Saratoga Speed, San Jose, CA   2012-present
CXO

Startup building product line consisting of flash-based storage box with file and block protocol offload and a "rack-in-a-box" composed of micro-servers and micro-flash using HW-assisted Paxos and Crush for clustering

Second employee; defined product roadmap; conducted market research and sales calls visiting the usual suspects; co-architected all systems in the product line; coded a performance simulator

Currently working on an actor-based substrate for "sea-of-micro-servers" HW and Hadoop SW topologies

GoalWerks, Sunnyvale, CA   2009-2011
Founder, CEO

Startup building a cloud collaboration and social productivity platform that allows users to interconnect their goals, activities, and interactions with people, documents, communications, and web services

Starting with a concept, executed a "Lean Startup" value prop discovery with pivots, designed and iterated the UI with obsessive focus on the user experience, and coded the prototype client and server

Built the team, evolved the prototype into a beta using an agile methodology, acquired beta customer

Locke-Rand Institute, Atherton, CA   2007-2009
Founder, CTO

Startup architecting software infrastructure for large-scale, distributed, and mobile cloud computing

Employed novel operating system architecture, abstractions for distributed concurrent software, and "virtual compute factories" as abstractions for mapping IT expenses to business goals via Goal-based SLA's

Dynamically maps SW services onto HW resources to optimize business value functions and economic criteria

Automation of system administration and measurement incorporated as first-class citizens

Salvus Group, Lake Forest, CA   2005-present
Former Vice President of Engineering, current Board of Directors

Develops and sells a HW/SW system for real-time monitoring of supply chain transportation networks

Mote hardware installed in truck trailers self-organizes a wireless mesh network that monitors environment and geographical position which then feeds a customizable web portal with backend data analytics

Iterated the business plan through multiple pivots while conducting market research and technology exploration

Closed the company's first sale; the buyer was a Fortune100 company

Appgenesys, San Jose, CA   2000-2001
Vice President of Research and Development

Managed the multi-site engineering department of this Loudcloud-like managed datacenter services provider

Delivered an extensible framework for automated datacenter management including modules for:

Staging, replication, and provisioning of arbitrary software stacks onto available servers

Performance monitoring of servers, network, and software components with mapping to SLA requirements and billing criteria

Analytics of behavior data with feeds to customizable dashboards for NOC personnel

Database for automated asset tracking and configuration management

Multiple datacenters worldwide running multi-tier web stacks on Windows, Solaris, and Linux/LAMP

Scaled large customers such as General Electric, BellSouth, WebMD, and Playboy

Actively involved in corporate strategy, business development, and product planning

Intel, Santa Clara, CA   1990-2000
Director of the Enterprise Platforms Lab

Built and managed a large, multi-site organization

Delivered several complex infrastructure projects:

Java virtual machine and JIT (just-in-time) dynamic compiler

Framework for monitoring the dynamic behavior of distributed web-based software components

Whole-system performance simulation and measurement environment with analytics (>750k LOC)

Instruction-level-parallel and thread-level parallel compilers

Architecture and micro-architecture of future microprocessors and server platforms

Managed a $25M+ budget funding academic research worldwide

Actively involved in corporate strategic planning and due diligence for acquisitions and investments

External interface
Significant customer interaction for market research, product planning, and new product rollouts
Represented Intel to the business and technical press, industry and financial analysts

Itanium lead architect
Member of the team that performed due diligence and consummated the multi-billion dollar Intel-HP deal
Lead architect of the iA64 instruction set; co-inventor of many of the fundamental patents
Customer interface for strategic OEM relationships for the Itanium product line

Pentium architect
Architect responsible for pipeline design including branch prediction and the cache hierarchy
Performed all customer interface in the U.S. relating to product planning and rollout

Startups and established companies   1982-1989
Architect and designer of hardware and software systems
Architected, coded, shipped, and supported an ERP system sold as SaaS including production control, inventory management, and payroll
Delivered the diagnostic/boot processor and the cache-coherent, interleaved main memory for a mini-supercomputer based on a proprietary VLIW
Architected and shipped the hardware and microcode for a hard disk controller and a half-inch streaming tape controller for a loosely-coupled multi-processor
Delivered network hardware and network simulation software for a proprietary bit-slice mini-computer

EDUCATION

Stanford University, Stanford, CA and University of California, Berkeley, CA
2002-2004
MBA-track curriculum with courses in accounting, finance, strategy, marketing, sales

Rensselaer Polytechnic Institute, Troy, NY   1978-1982
Bachelor of Science in Computer and Systems Engineering with a minor in Economics