
Senior-Level Engineering Manager

Growth-focused professional with a robust track record of innovation and reliable technical leadership

Accomplished technology leader skilled at guiding top-talent engineering teams, advancing leading-edge technologies, developing strategic alliances, and leading business to new growth by capturing emerging market opportunities through expert design and innovation. Demonstrated success in end-to-end product development, strategic planning, cross-functional leadership, and intellectual property. Extensive track record building great teams. Success in multiple startup and new business creation initiatives.

HIGHLIGHTS OF EXPERTISE

- Award-winning Product Design
- Strategic Technical Roadmaps
- IoT Platform and Ecosystem Development
- Project, Staff, and Program Management
- Domestic & International Alliances
- Scaled Agile Framework (SAFe) & PLM
- Patents & Intellectual Property
- Agile Scrum and Product Owner
- Master-level Electrical Engineer
- Machine Learning/Artificial Intelligence

SELECTED ACHIEVEMENTS

- Drove \$500 million in new revenue valuations by delivering on two strategic Intellectual Property Licensing (IPL) initiatives
- Led development of several world-first innovations:
 - Electro-optical navigation (aka optical mouse)
 - **LightScribe_{tm}** Opto-chemical printing
 - Cutting edge **e-Copier_{tm}** portable scanner
 - **HP Connected Drive_{tm}** advanced software ecosystem connecting users to their data
 - **i-DEC_{tm}** Digital Entertainment Center
 - **Photosmart eStation_{tm}** tablet and back-end services
 - 7 generations of **Mediasmart_{tm}** & **Datavault_{tm}** Home Servers
 - Electro-Chemical Impedance Spectroscopy (EIS)
- Tripled year-over-year engineering services revenue by cultivating strategic alliances
- Successfully designed and executed technology roadmaps for IoT platforms & services, scanners, data storage, instrumentation, and digital content delivery
- Senior Product Owner of Commerce Back-End deployed in 11 countries
- Inventor of 17 US patents, 5 European patents, and author of 16 publications
- Technical Expert for multiple groups in the Blu-ray Disc Association (BDA) and received the 1st PSG Leadership Award for technology and IP contributions to Blu-ray
- Served on over 50 product steering committees/BODs for robotics, data storage, scanning, printing, and cloud services
- Demonstrated success in managing large global teams and cultivating partnerships

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Career Experience

Ovantek, Loveland, CO (Present) PRESIDENT & CHIEF

Consulting, forging key business alliances, and innovating IoT ecosystems. End-to-end product design and development of 60GHz, phased-array, wireless HDMI, PC IO Bus & HW interrupt instrumentation, and technical development of several new "stealth" products.

Vergent Products, Loveland, CO (2017 to 2021) CTO & VP OF ENGINEERING

Transformed strategic direction and revitalized company-wide productivity through exceedingly successful partnerships. Held direct oversight of diverse engineering personnel, strategy formulation, and execution. Generated comprehensive strategic roadmaps. Tripled year-over-year revenue through partnerships and new business alliances.

- Spearheaded massive infrastructure changes to enhance product realization capabilities.
- Acquired and leveraged ISO13485 medical development certification into engineering services.

Arrow Electronics, Centennial, CO (2018 to 2019) ENGINEERING MANAGER, GLOBAL IOT SOLUTIONS

Excelled in guiding diverse, vast, and geographically distributed teams in achieving and exceeding project objectives. Served in essential leadership position, skillfully balancing multiple competing responsibilities, and fruitful strategic partnerships in cooperation with strategic business development teams.

- Built and coordinated results-focused team members in creating and introducing first-of-its-kind IoT solution.
- Orchestrated elaborate design development for state-of-the-art IoT products and breakthrough ecosystems.

Snapfish LLC, Fort Collins, CO (2016 to 2017) SENIOR PRODUCT OWNER, COMMERCE BACK-END

Owned all commerce transactions for 11 countries. Drove numerous web-based alliances, managed backlog (features & technical debt) with high-reliability SW cloud solutions. Promoted large-scale deployment of a modernized address validation service and drove scalability and deployment strategies for the commerce engine and gifts category.

Hewlett Packard, Fort Collins, CO (1991 to 2015) SENIOR R&D MANAGER & MASTER EE

Several critical roles demonstrating exemplary technical dexterity and leadership in developing teams, systems, and architectures. Drove productization of leading innovations in HW, SW, and FW while deploying ecosystems that spanned IaaS, PaaS, and SaaS. Directed multiple teams across HP divisions enabling the successful launch of innovative and highly rewarding emerging market opportunities. Drove global strategies that exceeded requirements in several markets.

ADDITIONAL EXPERIENCE

ComByte ■ Senior EE and ASIC Design Engineer, EE/FW/ASIC innovations in data storage

Colorado Memory Systems / Hewlett-Packard ■ Lead Electrical Systems Engineer, drive-training

Apogee Robotics ■ Project Manager & Senior EE, Award-winning robotics and automation designs

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Education & Credentials

University of North Dakota – College of Engineering, Grand Forks, North Dakota

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

US PATENTS

USPTO #10,102,213 ▪ System having an apparatus that uses a resource on an external device
USPTO # 9,497,483 ▪ Method for generating and decoding a coded picture signal
USPTO # 9,311,304 ▪ Storage subsystem data duplication policy
USPTO # 9,152,492 ▪ Performing recovery of a headless computer
USPTO # 9,063,941 ▪ System having an apparatus that uses a resource on an external device
USPTO # 8,578,091 ▪ Providing data redundancy using an internal and external mass storage device
USPTO # 8,554,995 ▪ Virtualized storage subsystem to mask redundancy complexity
USPTO # 8,085,948 ▪ Noise Reduction in a System
USPTO # 8,005,993 ▪ System and Method of a Storage Expansion for Network Attached Storage Device
USPTO # 7,933,172 ▪ Method for Playing Content Using Master and Slave Optical Discs
USPTO # 7,916,164 ▪ Labeling Methods and Apparatus Using Energy of Two Wavelengths
USPTO # 7,865,710 ▪ Software Recovery without the use of a Keyboard, Mouse, Trackball, or Monitor
USPTO # 7,822,997 ▪ Making a Storage Device Unusable until OS or System FW Recovery Invoked
USPTO # 7,814,246 ▪ Translation of Data Storage Redundancy Configuration and Host Interface Type
USPTO # 7,734,735 ▪ Automatic Configuration System and Method
USPTO # 6,970,811 ▪ Hardware Modeling of LED Relative Brightness
USPTO # 6,760,124 ▪ Software Determination of LED Brightness and Exposure

EUROPEAN PATENTS

#1839444 ▪ Picture coding apparatus and picture decoding apparatus
#2307969 ▪ Storage subsystem & electronic device with controls that hide the details of the subsystem
#1997109 ▪ Converting a still image in a slide show to a plurality of video frame images
#1829029 ▪ Labeling methods and apparatus using energy of two wavelengths
#2164262 ▪ Picture coding apparatus and picture decoding apparatus

SELECT PUBLICATIONS

- Miniature Projection User Interface for NAS Device
- Home Server with Secure Memory Device for Locking Proprietary Software to Platform
- Pivoting Apparatus for Optimizing Remote Power Transfer In Digital Picture Frame System
- Identity Escrow for Constrained Information Mining and Group Knowledge Distillation
- Authentication by Characteristic Navigation Motions
- Method for Detection and Rejection of Attempts to Falsify Biometric Authentication
- Channel Royalty Pool for Blu-ray Supplemental Content Sales
- Hardware Innovation in HP's New Home Storage Server Products
- Remote Power for HP Digital Picture Frames
- Bare-Metal Recovery Innovation for Home Storage Server Products
- GPU Computationally Enhanced Home & Entertainment Server
- Parasitic Cantilever Fan Airflow Gen. by Modulating the Electro-Magnetic Field of Remote Power
- New Home Server Product Concept: HP Home Utility Server
- Constrained Layer Acoustic, Thermal & Vibration Sheath for Hard Disk Drives
- Mobile Event Verification Using Services-Based Model HP IPAQ "Agent"
- "A Solo Journey Through Personal Product Development", Midnight Engineering Magazine, p. 44 May/June 1993