KHANH NGUYEN

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Technical Manager with over 25 years' experience in General and Internet (Web-based) technologies. Track record of designing and developing highly scalable and cost-effective applications, systems, and network infrastructure. Successful history of building new, and turning around pre-existing IT and engineering organizations, to highly proactive and responsive departments to support organizations efficiently.

- Internet & eCommerce Development
- Data Center and Cloud-based Development
- Project Management
- Enterprise Systems Planning & Integration
- IT Systems and Security Governance
- Product & Application Development
- Vendor Relationship Management
- Offshore Development & Management
- Team Building & Leadership
- P&L Management

RECENT PROFESSIONAL EXPERIENCE

PLATINUM EQUITY, Beverly Hills, CA

Consultant / VP of Technology Operations

Jul. 2019 – PRESENT

Private equity investment firm founded by Tom Gores and is one of the largest private companies in the USA with a global presence in Beverly Hills, New York, Boston, Singapore, and London. Organization is focused on leveraged buyout investments of established companies in multiple industries including, but not limited to, manufacturing, hospitality, consumer, telecommunications, logistics, aerospace, and technology services.

Technologist brought in by CTO to help manage restructuring of IS systems, identify process improvements, and deploy operational optimizations, while bringing the technology platform up to current standards and technology team to best practices. Also tasked with formation of data privacy policies and compliance.

• Identify, optimize, integrate and manage enterprise-wide global IS systems and processes

- o Identified current state processes through business process modeling, and proposed optimizations when appropriate.
- o Identified long-term strategy and roadmap for technology improvement implementations with global shared services model utilizing MSPs and BPOs for management of corporate and portfolio companies.
- Managed AnaPlan deployment to aggregate financials from global management portfolio for consolidated executive consumption of financial data and dashboards for investor relations.
- Managed SalesForce usage and integration with internal SharePoint resources while coordinating with Navatar on additional app integrations.
- o Identified SharePoint content and usage strategy, and managed application development.
- o Managed deployment SAP Concur enterprise-wide to manage travel and expenses.

• Identify and formulate ITSM best practices and deployment of ITSM workflow and management tools onto ServiceNow and Ivanti ITSM platform

- o Identified IT business processes and deployed corporate IT help desk best practices.
- o Incorporated and managed all electronic assets with asset management platform tools.
- o Identified and deployed change and configuration management policies and integration into CMDB tools.
- o Managed deployment and incorporation of Tangoe MMS and TEM services to address global mobile devices procurement, support, and account consolidation to significantly reduce costs and ease of management.

• Identify infrastructure security gaps and formulate new security policies, procedures, and solutions

- o Identified optimizations and deployment strategies incorporating FortiNet network security fabric.
- o Incorporated endpoint security with Digital Guardian DLP, Absolute Software, and Microsoft Intune solution for all corporate remote and BYOD devices.
- $\circ\hspace{0.2cm}$ Formulated and enforce information security policies for the global organization.

• Identify and formulate data security and compliance policies

- Identified data security compliance policies in accordance with European GDPR and CCPA regulatory requirements.
- Identified reporting and controls within organization to ensure abidance to ISO 27001 to obtain third party audit certification.

MEDECISIVE TECHNOLOGIES, Irvine, CA

Nov. 2018 – Jul. 2019

Consultant / Interim CIO/CTO

Wholly owned technology subsidiary of a local private equity firm focused on providing technology services including software application development, systems and network infrastructure design and deployments, and IT security design and deployment.

Interim CIO/CTO managing application development and systems infrastructure teams focused on providing development and IT management services, mainly in the healthcare sector. Also offering architecture development and operations management to client partners.

• Re-architect unscalable business systems infrastructure for client partners

 Worked with client hospitals, diagnostic lab companies, clinics, and physicians on IS systems integration work with Laboratory Information Management, Electronic Medical Records/Electronic Health Records, HCM, CRM, ERP, RCM and Billing systems.

• Architect new SaaS-based business applications for clients

- o Architected, managed development and deployment of proprietary LIMS platform for multiple Urine Toxicology, Pharmacogenomics, and other laboratory diagnostics companies across the country.
- Architected, managed development and deployment of proprietary digital requisition workflow platform for multiple clinics, physicians, and hospitals across the country to properly collect ePHI (electronic Patient Health Information) data. This platform was integrated with EMR/EHR systems along with the utilization of mobile devices.
- o Architected, managed development and deployment of proprietary RCM and Billing systems and integration into other partner RCM platforms for electronic billing and reimbursements.
- o Architected, managed development and deployment of IoT patient monitoring devices for nursing homes, elderly care patients, and outpatient services organizations.

AMC HEALTH, New York, NY

Mar. 2018 – Jan. 2019

Consultant / VP of Infrastructure Operations

TeleHealth healthcare company operating for 15 years and focused on remote patient monitoring, patient care, and health assessments for clinics, hospitals, and physicians across the country. Offering an FDA-approved telehealth medicine platform and recently awarded a multi-billion dollar government contract with the national VA hospitals to support the patient care for millions of military veteran patients across the country.

Contracted to assist the CTO with new deployments of DevOps infrastructure and best practices while supporting new application development for mobile, IVR, and web-based solutions. Also responsible for new IS systems deployment and integration between CRM, ERP, DW, and other internal patient information systems.

• Re-architect unscalable business systems infrastructure

- Re-architected infrastructure to scale appropriately from the current n-tier MS-based solution to an open source solution adopting microservices architecture.
- Directed migration of on-premise and co-located infrastructure to cloud-based solutions using Amazon Web Services and Microsoft Azure.
- Evaluated and managed deployment of Call Center services to Five9 Contact Center to scale from old PBX call center platform.
- o Architected adoption and deployment of SalesForce eCRM (Sales, Marketing, Service, and Health Cloud solutions), migrating from unscalable proprietary CRM solution.
- o Architected and managed IS systems integration with SalesForce eCRM and Microsoft Dynamics ERP.
- o Architected IoT patient device platform for millions of patient data collections.
- o Architected adoption and deployment of Amazon AWS Redshift data warehouse solution to aggregate patient data for data science analytics and R&D product development.

• Introduce Application Development best practices

 Strictly enforced usage of Use Case documentation, UML diagramming, Business Requirements gathering and documentation (BRD), Business Process Modeling, and ITIL practices.

• Managed HIPAA security compliance and HITRUST certification initiatives

 Introduced new and revised current security policies to be compliant with HIPAA regulations and obtain SOC II and HITRUST certification.

• Streamline Operational processes

- Strictly enforced testing best practices including end-to-end, regression, and user acceptance testing along security application scanning utilizing HP Fortify.
- o Streamlined call center operations utilizing Five9 Contact Center platform integrated with SalesForce Service Cloud.
- Managed application development of FDA-approved remote patient care platform utilizing custom IVR implementation and IoT devices.

PROOVE BIOSCIENCES, Irvine, CA

Nov. 2014 – Mar. 2018

Chief Technology Officer / Chief Information Officer

Technology-driven personalized healthcare organization focusing on pharmacogenomics and pharmacodynamics in the pain space to address the opioid prescription drug epidemic. The main product offerings include test profiles designed to inform physicians of patient drug metabolism, pain perception, and opioid, non-opioid, and NSAID risk assessments.

Hired to revise IT infrastructure to address growth limitations and incorporate best practices for Application Development team. Business growth had rapidly outpaced poorly developed systems infrastructure and poorly integrated IS systems. Besides being charged with improving internal business systems, was also responsible for product and business development, management of technology M&A, and some corporate branding and marketing initiatives.

• Re-architect poorly developed business systems infrastructure

- Re-architected poorly developed PHP-based EMR system inappropriately adopted for LIMS (Lab Information Management Systems) usage into a microservices architecture utilizing Python and NodeJS frameworks and deployed on AWS (Amazon Web Services).
- Architected, managed development and deployment of all integration between LIMS and all lab instruments including ThermoFisher PCR systems for genetic data collections, Beckman Coulter and SCIEX for urine toxicology, HealthPac for medical billing, and SalesForce for eCRM data.
- Migrated main business systems backend data store from MySQL to a combination of PostgreSQL, Cassandra, and Oracle. Redesigned main business data model to an enterprise-level data model incorporating abstract data structures to address rapidly evolving data store requirements. Operational data marts of differing data models were used to address the different microservices. Utilized MongoDB for patient and health records data aggregation from multiple EHR/EMR systems for preprocessing.
- Architected, managed development and deployment of NetSuite ERP integration with SalesForce eCRM and ADP WorkForce NOW HRIS.
- Architected integration of ALL business systems with data warehouse to aggregate data to drive business analytics displayed through SalesForce dashboards for executive and operational management teams.

• Re-architect poorly deployed Desktop Infrastructure; Network and Systems security

- o Revised enterprise-wide desktop infrastructure onto Citrix VDI running on hyper-converged Nutanix infrastructure for simplicity of management and security.
- o All Desktop VDIs incorporated strict security policies to prevent any remote data copy outside of the VDI environment to ensure HIPAA compliance when dealing with sensitive ePHI.
- Migrated Google Apps usage to Microsoft Office365 to address business growth and seamless usage of Microsoft Office products.
- Deployed Symantec's DLP (Data Loss Prevention) solution to tag and further lock down any potential transference of ePHI onto cloud infrastructure and e-mails outside of corporate networks.
- Overhauled corporate network firewalls to utilize Palo Alto Networks firewalls to ensure network perimeter security and monitoring.

• Architect EDC (Electronic Data Capture) eCommerce application suite servicing clinics across the country

- Architected, managed development and deployment of full digital patient and physician data capture applications on mobile Android and iOS devices, utilizing a combination of SalesForce application suite and proprietary implementation of open stack technologies utilizing Python, AngularJS, and PostgreSQL.
- Architected, managed development and deployment of online Physician Portal, supporting Physician management of
 Patient data. Physicians could manage ePHI such as patient health history, ongoing treatment plans, progress notes,
 diagnoses, medications, allergies, and lab and test results. Administrative and Billing information were also
 managed in order to facilitate automated billings between Physicians, Patients, and Insurances and the ability for
 online orders of genetic and toxicology lab tests.
- Architected, managed development and deployment of online Patient Portal, supporting Patient management of their
 own medical records and ePHI data including updating their billing information, updating their medical treatment
 information and progress notes, communicate with Physicians, order and retrieve their genetic and toxicology lab
 tests, and participate in medical research surveys for medical research. The Patient Portal also managed patient
 direct billing and balance billing.

• Architect Big Data platform to support Research and Development

- Architected, managed development and deployment of internal R&D platform utilizing a combination of technologies including MongoDB, Cassandra, PostgreSQL, and Python for machine learning applications - to aggregate patient medical health records including medical history, patient diagnoses, treatment plans, medication, genetic, and toxicology test results; and to corroborate specific health conditions with Opioid usage. Platform included OLAP interfaces to support IBM SPSS usage for predictive modeling.
- Architected integration APIs with commercial systems to allow for content updating between eCommerce platform and partner EMR/EHR systems, and partner CROs (Clinical Research Organizations) for data access, clinical trials, and research validations.
- Partnered with D-Wave Systems and SRI (Stanford Research Institute) to create R&D system to validate genetic research on patient data models utilizing machine learning algorithms including Markov and Bayesian Network Models.

• Introduce Business Operational changes to address inefficiencies

- Streamlined Billing operations, eliminating all internal paper billing processes to fully electronic billing and digital archiving.
- Streamlined Laboratory Intake processes by converting to complete electronic data capture systems with field offices
 utilizing computers and tablets to capture data from physicians and patients, eliminating paper workflow and
 reducing data capture errors by 98%.
- Architected, managed development and deployment of consumer facing web portals to deliver online test reports, and digitally capture physician and patient health information, eliminating all paper and ink costs and data capture errors.

- Architected, managed development and deployment of QC best practices and tools to manage laboratory specimen tracking and handling.
- Architected, managed development and deployment of internal Customer Service Portal to address business operations in handling complete end-to-end customer transactions.

• Introduce Application Development best practices

- Strictly enforced usage of Use Case documentation, UML diagramming, Business Requirements gathering and documentation (BRD), Business Process Modeling, and ITIL practices.
- o Enforced usage of Scrum and Kanban software development practices utilizing JIRA to manage tasks.
- Strictly enforced testing best practices including end-to-end, regression, and user acceptance testing. Maintained at least 95% unit test coverage on all application development code utilizing unit test frameworks such as PyUnit, Mocha, and Instanbul.

PAST PROFESSIONAL EXPERIENCE

WIKIREALTY, Los Angeles, CA

Mar. 2013 - Mar. 2014

Consultant / Chief Technology Officer

Real estate startup specializing in a subjective content distribution network among real estate brokers, firms, and professionals with a heavy emphasis on social networking and mobile presence. Startup was a subsidiary of a real estate development firm specializing in residential and commercial real estate development exceeding \$1B in assets.

Contracted for short-term redesign of application architecture and revising of startup business model. Patent author for newly developed business methods. Managed remote development teams in San Francisco, Poland, and in Los Angeles.

PREDICTIVE TECHNOLOGIES, INC., Rancho Santa Margarita, CA

Nov. 2009 - Jun. 2014

Consultant / Senior Engineer

Consulting firm specializing in third-party Oracle applications and UNIX systems implementations and infrastructure management. One of only a handful within the Oracle Partner Network, PTi handles implementations as an outsourced solution for small to large businesses such as Evite, Smart & Final, Black and Decker, Anchor Blue, and Trader Joes.

Engaged in a contract as an outsourced implementation architect and engineer to handle systems and application support and to sustain technical prowess. Worked with multiple clients to revise and maintain their internal business systems and application infrastructure.

C'EST CHOUETTE, Los Angeles, CA

Sept. 2008 – Jan. 2014

Consultant / Vice-President of Information Technology and Operations

Successful private label fashion apparel company producing a multitude of products carried at thousands of retailers across the country including Macy's, Sak's Fifth Avenue, Nordstrom's, and Century 21.

Contracted to revise and support application development initiatives, operational management of Oracle e-Business Suite infrastructure, and any on-premise infrastructure revisions. Additionally, also charged with general IT management and daily production and operations management.

LEVERAGE, INC., Irvine, CA

Sept. 2004 – Jul. 2008

Chief Technology Officer

Startup venture providing B2B Marketing and Advertising SaaS services for Tier 1 retailers such as Home Depot and Best Buy and major Consumer Packaged Goods companies such as Procter and Gamble and B2C online consumer services. Backed by Wilson Sonsini Goodrich & Rosati and Knobbe Martens Olsen & Bear law firms. Fred Weber, former CTO of Advanced Micro Devices (AMD) is also an active board member and had left his post at AMD to be involved.

Chief Architect for technology infrastructure for both internal systems and interfaces to partner business systems, online eCommerce platform, and online marketing and advertising solutions. Patent author for product business methods. Managed 24 (local) direct reports and remote development teams in China and India to leverage a close to 24-hour development lifecycle utilizing Agile development methodologies.

FREEDOM COMMUNICATIONS, INC., Irvine, CA

Feb. 2001 – Jan. 2003

Chief Technology Officer

One of the top 10 largest media companies in the country with assets in over 30 magazines, 60 newspapers, and 40 television stations across the nation. Privately held with an annual revenue of \$4 billion.

Part of a restructuring executive team to regain profitability for a flagship division, but later charged with leading overall technology development across the enterprise, which included revising the technology infrastructure, developing internal procedures and processes, and developing new technologies for failing businesses to increase productivity, efficiency, and revenue. Led all New Media (web-based) content and eCommerce development. Managed an enterprise-wide (across 150+ business units) IT staff with over 25 direct and over 200 indirect reports.

DRDREW.COM, INC., Pasadena, CA

Chief Technology Officer

Startup venture with Dr. Drew Pinsky of MTV Lovelines, CNN and VH1 Celebrity Rehab fame. Board members included Dale Fuller, former CEO of Borland, VP of Apple, and CEO of McAfee; Guy Kawasaki, Chairman of Garage Technology Ventures; and Heidi Roizen of Softbank Ventures.

Recruited by venture capital firm to start up a multimedia company along with Dr. Drew Pinsky from the ground up. Designed and deployed all technology infrastructure and managed all application development. Created the first social media networking website that garnered over 1MM subscribers prior to MySpace or Facebook reaching 200,000 subscribers. Managed a technology staff of approximately 20 direct reports.

WANG GLOBAL/WESTERN DIGITAL, Irvine, CA

Mar. 1999 - May 1999

Jun. 1999 – Dec. 2000

Consultant / Systems Architect

Wang Global was the largest IT outsourcing firm in the world with annual revenues of \$4 billion, and Western Digital is one of the top 3 hard drive manufacturers in the world.

Contracted by Western Digital through Wang Global to overhaul all UNIX infrastructure across Western Digital's multiple global sites including corporate in Irvine, San Jose, Rochester, Malaysia, and Singapore. While maintaining multiple Dynix servers including Western Digital's high-end family of Sequent supercomputers, was also charged with replacing all systems with Sun Microsystems Enterprise solutions including the incorporation of their Sun Starfire or Enterprise 10000 (CRAY supercomputer) which replaced their main engineering database systems at their corporate Irvine location.

MICHEAL MILKEN FAMILY FOUNDATION, Santa Monica, CA

Oct. 1997 – Sept. 1998

Technical Specialist

Michael ("Junk Bond King") Milken's non-profit foundation for educational research. This organization contributes to thousands of schools across the country along with a network of over 15,000 educators and has an annual operating budget of over \$400 million.

Responsible for developing a new online collaboration environment to establish a common educational platform for over 15,000 educators across the country and to support educational research. The resulting project became the highlight of the Intel Symposium with then Intel CEO Craig Barrett. Additional responsibilities included revising the technology infrastructure of Michael Milken's Foundation, the CapCure organization (largest Prostate Cancer database), the \$20 million investment in the Milken High School, and all affiliates associated with the Foundation. Also drove product development for Knowledge Adventure software affiliate. Managed a budget of over \$30 million.

NASA – JET PROPULSION LABORATORY, Pasadena, CA

Mar. 1996 – Aug. 1997

Systems Architect

Federally funded R&D development center for the National Aeronautics and Space Administration, specifically collaborating with the California Institute of Technology on special projects.

Worked on a real-time 300+ node clustered supercomputer designed to process data from a set of space-bound interferometer telescopes designed to surpass the limitations of optical telescopes such as the Hubble Space Telescope. The project was focused on the use of multiple physical interferometer telescopes that would mimic a much larger physical telescope without said physical limitations. This project led to the basis of the WIDAR (Wideband Digital ARchitecture) supercomputer at the famous Very Large Array (VLA) interferometer telescope based out in New Mexico.

NOTABLE CONTRACT WORK

- BLACK AND DECKER Santa Monica, CA
- SCREEN ACTORS GUILD Los Angeles, CA
- RIOT GAMES Santa Monica, CA
- CUSTOM BUILDING PRODUCTS Seal Beach, CA
- **EVITE** West Hollywood, CA
- ANCHOR BLUE Corona, CA
- RED DIGITAL CINEMA Foothill Ranch, CA

- WET SEAL Foothill Ranch, CA
- PORT OF LOS ANGELES San Pedro, CA
- NBC Universal / Comcast Universal City, CA
- AMERICAN TRAFFIC SOLUTIONS Phoenix, AZ
- SMART & FINAL Commerce, CA
- TRADER JOE'S Monrovia, CA

PROFESSIONAL SKILLS

Software Development Life Cycle (SDLC): Waterfall, Iterative, Extreme Programming (XP), Agile, Scrum, RAD Software Development Tools: CVS, SubVersion, Rational Rose, ArgoUML, IntelliJ IDEA, Eclipse, GIT, PyCharm, GoLand Computer Languages: C/C++, Perl, Embedded Perl, Tcl, ASP.NET, PHP/FI, Javascript (AJAX), HTML, SQL, HDML, WML, Java (J2EE, JSP, Servlets), XML, Groovy, Grails, Python/Django, Go

Cloud Computing and Virtualization Environments: OpenStack, VMware, Amazon Web Services, OracleVM, Xen HyperVisor, Citrix, Azure, Google Cloud Platform

Operating Systems: Windows (Workstation) 2000/XP/2003/Vista/8/10 and (Server) NT/2003/2008/2012/2016, UNIX (BSD Variants: SunOS 4.1.x, Ultrix, BSDi BSD/OS, OpenBSD, NetBSD, FreeBSD, Linux –

Fedora/Redhat/Slackware/Debian/Ubuntu/Oracle System V Variants: Solaris 2.x/7/8/9/10), VMWare ESX Server

Database Servers: SOLID, mSQL, MySQL, Oracle, Sybase, PostgreSQL, CouchDB MongoDB, Cassandra, Redis, ElasticSearch, Memcached, MS SQL, InfluxDB, Greenplum

Application Servers: Apache, Tomcat, JBoss, Microsoft SharePoint

Network Security Implementations: Firewalls, Encryption (PGP, DES, SSL), Kerberos, Router Packet Filtering, TCP Packet Wrappers, TripWire, xinetd, SSH2, OpenSSH, VPNs, Digital Guardian DLP, FortiNet Security Appliances

Hardware: Sun Fire Servers, Sun Enterpriser servers, Cisco routers, Cisco Catalyst switches, Cisco PIX firewalls, Network Appliance NAS and SAN solutions, EqualLogic SAN infrastructure, EMC SAN, IBM SAN, Nutanix, FortiNet

EDUCATION

UNIVERSITY OF CALIFORNIA, IRVINE

Bachelor of Science in Computer Science Bachelor of Science in Information Science

CERTIFICATIONS

- Certified Information Security Manager (CISM)
- Cisco Certified Network Associate (CCNA)
- · AWS Certified Solutions Architect
- Sun Certified Programmer for the Java 2 Platform
- Microsoft Certified Systems Engineer (MCSE)
- SalesForce Certified Administrator

- Certified Information Systems Security Professional (CISSP)
- Cisco Certified Design Associate (CCDA)
- Certified Scrum Master (CSM)
- Sun Certified Solaris Systems Administrator
- Red Hat Certified Engineer

BACKGROUND

- Started programming at the age of 7 in BASIC and Pascal, creating my own RPG, then C and C++ in high school and Java in college.
- Started management of UNIX systems since high school (SunOS).
- Provided on-line UNIX and HTML help on the Internet at the beginning stages of the World Wide Web ('93) and was featured on the *Discovery Channel* covering the Internet and Internet Personalities.
- Primary language: English
- Work Authorization: US Citizen