

# Craig Hamill

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## EMPLOYMENT:

UL RESEARCH INSTITUTES | 03/2023 - Present

### Director of Innovation, Technology and Knowledge Management

- Responsible for the development and execution of the 'Lab of the Future' project, which is focused on leveraging cutting-edge technologies such as artificial intelligence (AI), machine learning (ML), and extended reality (XR) to transform the way we approach research and innovation.
- Led strategic initiatives under 'Project Ascend' focusing on the divesture and split of UL Non-Profit and For-Profit companies. My focus was on end-user and cloud computing, along with onboarding support and managed service providers, to build core Information Technology infrastructure.
- Directed the implementation and optimization of high-performance computing infrastructure, enhancing research capabilities and driving technological innovation across diverse business units.
- Led cross-functional innovation committees, aligning technology strategies with organizational goals and improving collaboration and operational efficiency.
- Developed governance frameworks for research computing, improving resource management and ensuring consistent execution of strategic initiatives.
- Spearheaded the design and execution of innovation models and platforms, integrating advanced software solutions to streamline R&D processes and accelerate time to market.
- Assessed emerging technologies and external innovations, providing strategic recommendations to incorporate them into ongoing research and development efforts.
- Collaborated with internal and external experts to optimize infrastructure, resulting in improved computational efficiency and scalability for critical research initiatives.
- Plays a key role in executive-level advisory boards, providing insights and recommendations that shaped the organization's innovation and technology strategy.
- Developed the ULRI Center of Innovation (COIN) and the Research Innovation and Technology teams. The focus is to develop cutting-edge technology in a cross-function and industrial metaverse physical lab.

THE UNIVERSITY OF CHICAGO – PRITZKER SCHOOL OF MOLECULAR ENGINEERING | 07/2019 - 03/2023

### Director of Information Technology

- I lead the information technology department at the Pritzker School of Molecular Engineering. I am responsible for developing the Information Technology department budget, including operating, capital, and long-term technology development projects.
- I provide technology-based leadership in support of academic, administrative, and research excellence. I provide consistent, reliable, innovative, and cost-effective technology solutions and support to drive the current and future technology initiatives within the PME and the PME Affiliated partners.
- I have established strategic direction, service priorities, technology partnerships, customer service approaches, and organizational structure in consultation with PME and University of Chicago leadership. I strengthen and grow the PME Technology team through training, mentorship, and skills development.
- I work to develop new enterprise-class services and leverage current services offered by the University of Chicago IT and Shared Services team to address the technical needs of faculty, staff, and research requirements within the PME and PME affiliated partners.
- I have developed and implemented technology strategies to address the current research growth to enable new and existing research staff and projects to focus on shifting research priorities. I have innovated our research technology footprint by leveraging research class storage and on-prem and cloud-based elastic server and compute infrastructure.

- Developed and implemented enterprise cyber-security strategies and frameworks utilizing a multilayered cyber security footprint with CrowdStrike Falcon, Rapid7 Vulnerability Management, and leveraging network scanning and early detection toolsets. NIST SP 800-171 Compliance, NIST 800-53, ISO/IEC 27001, and SOC2 compliance.
- I lead the design and development of ITIL/ITSM best practices, processes, and tools to increase speed and technology velocity and improve overall service quality for the PME technology support.
- Working with Executive Leadership and critical stakeholders, I have implemented an organizational-wide Intranet (SharePoint) to allow for departmental collaboration, document and resources sharing, and centralized news, employee appreciation, and development portal.
- In consultation with the research staff and faculty, I have developed a 'menu' of technology resources to engage lab and researchers' profiles and workloads. Leveraging Google Cloud Platforms (GCP), Amazon Web Servers (AWS), Microsoft Azure along with internal cloud self-hosted VMWare complimented with a layered Network Attached Storage (NAS) and Storage Area Network (SAN). We can design cutting edge, highly available, and resource-intensive processes using an elastic technology and data methodology.
- Working with the central campus technology team, I have implemented Mobile Device Management processes with JAMF for Apple Devices and System Center Operations Manager for Windows Devices.
- Responsible for the RFP to bring enhanced 3<sup>rd</sup> Party system patching tools Automox, InTune, and Patch-My-PC and vulnerability management software Rapid7 Insight.
- Lead Project Manager, Developer and System Designer for Salesforce CRM to enhance the PME contact database to consolidate and leverage various PME employee interactions within UChicago into a single, unified platform covering the entire life cycle of that employee and continuing as part of outreach and relationship building as PME members become alumnus. Along with leveraging corporate and industry partnerships to drive development and strategic partnerships for the PME Research and Academic goals.

## **REDWOOD LOGISTICS (FORMALLY STRIVE LOGISTICS) | 09/2011 – 06/2019**

### **Senior IT Manager**

- Responsible for the development, project management, installation, maintenance, and ongoing support of multi-site hyper-converged and highly available network and server infrastructure. Employing Tier 1 infrastructure components such as HP, Dell, Cisco, EMC and connecting multiple data centers, office locations with AT&T MPLS circuits, and VMware VeloCloud SD-WAN appliances.
- Worked with Senior and Executive staff to create financial forecasts, outline expenditures, and develop cost profiles for Return on Investment and Net Present Value of Technology-based projects. Am responsible for maintaining cost control and contract management with all technology (Support, Infrastructure, and Development) related expenditures. Develop operational and capital expenditure strategy for Executive Staff.
- I architected, designed, and developed core Microsoft Hyper-V virtual server infrastructure for a highly transactional environment using High Availability and multiple cluster failover protocols and employing hyper-converged technologies to provide consistency, uptime, and reliability of core computing infrastructure systems.
- Management of support, infrastructure, and operations teams. Directly responsible for the effectiveness and efficiency by defining, delivering, and supporting strategic plans for implementing technology projects.
- Management and design of multiple Storage Area Networks (EMC VNX and Dell Compellent). I utilize snapshots, deduplication, failover replication, and site-to-site recovery models to ensure business continuity and disaster recovery.
- Developed multi-site Hyper-V Replica failover and SQL Server Replication to ensure the computing infrastructure's continuity and ultimately provide high availability for all core technical resources.
- Design and implementation of IT strategy that includes upgrading all servers, network equipment, and future disaster recovery methodology. I have successfully tested the Disaster Recovery Strategy with offsite vendors to determine core services, data continuity, and availability.

- Designing and implementing infrastructure and application hardening methodologies (Servers, Storage, Networks, Data Stores, Endpoints, Users) including least privileges, firewalls policies, access control, SSO, IPS, Encryption
- Primary contact with the internal software development team to provide project engineering, infrastructure, and DevOps support to all development software, code source repositories, and code release systems.
- Primary and Senior Support Engineer for LoadRunner, a proprietary logistics transportation management system.
- VOIP implementation of internet-based SIP BroadSoft backbone-based telephony system.
- Directly responsible for vendor management, budget allocation/reconciliation, and project development and management.
- Project Manager for Technology Service projects, including implementation upgrade of financial system Microsoft GreatPlains – Exchange Server – Custom built ERP and trading platform
- Responsible for the development of staff by recruiting, training, and mentoring junior administrators and supporting personal and systems engineers. I communicate with staff the job expectations, delegation of projects, and performance and reliability expectations.

### **LOYOLA PRESS | 03/2008 – 09/2011**

#### **System Engineer**

- Responsible for highly available server infrastructure, networking, and desktop framework.
- Management and design of EMC Storage Area Network (SAN). I utilize snapshot, deduplication, and archiving, integrating via iSCSI SQL Server Database, Exchange Storage, and Microsoft, Apple file storage.
- Responsible for outsourced external cloud web infrastructure with RackSpace and solely accountable for the web management and development of the core business branded website ([www.loyolapress.com](http://www.loyolapress.com))
- Design and implementation of IT strategy that includes upgrading all servers, network equipment, and future disaster recovery methodology. I successfully tested Disaster Recovery Strategy with an offsite vendor to determine core services, data continuity, and availability.
- Directly responsible for vendor management, budget allocation/reconciliation, and project development and management.
- Project lead for SLA improvement with outside vendors and consultants.
- I have created and documented overall technology security audit details and strengthened all aspects of physical, data, and network security through upgraded 3-Factor authorization, KeyCard access to restricted areas, and hardened network devices.
- Project Manager for Technology Service projects, including implementing Microsoft Office Sharepoint Server 2007, FrontRange GoldMine Enterprise Edition CRM, and various product integration projects.

### **BONDED COLLECTIONS CORPORATION | 07/2006 - 03/2008**

#### **Systems/Network Administrator**

- Responsible for all Server, Network, and Desktop infrastructure. Including Microsoft Windows 2003 servers, RedHat Linux server applications, Windows 2000, and XP desktop computers.
- Administration of core collections application, Infinity Collection System, built around Java and is currently running on RedHat Linux with a PostgreSQL database.
- Implementation of new Cisco Pix firewall with ISPEC VPN and QMAIL email server.
- Redesign of internal network topology, DNS, and Active Directory infrastructure.
- Revamp of IT security procedures, including hardening the existing external firewall and DMZ servers. Hardening of all internal servers and penetration and security audits described by NIST and Gartner.
- I designed and developed a Business Continuity and Disaster Recovery plan.

### **ROSALIND FRANKLIN UNIVERSITY | 07/2003 – 07/2006**

#### **Systems/Project Manager**

- Responsible for 102 infrastructure class servers, including Exchange 2003 email, domain servers, online learning management servers, various application servers, and ERP servers.

- Received certified training on design, test, and implementation of service management software such as Microsoft Operations Manager, HP OpenView, and Insight Manager.
- Lead Policy creator and HIPAA security officer.
- Revamp all systems and email procedures. Projects include updated Backup/Disaster Recovery Procedure and policy, email retention, and password policies.
- Lead IT project leader for all IT-related projects and infrastructure updates.
- Lead project coordinator for university wireless initiative.
- Design and implementation of an HP EVA5000 35Terabyte Storage Area Network
- Designed and implemented the creation of a new 1500sqft datacenter with new APC and HP hardware for current and future expansion of university services.
- Project design of university-wide projects such as university anti-virus and anti-spam initiative, file storage for all university members, consolidation of email storage by implementing Zantaz EAS software.

### **Helpdesk/Project Manager**

- Team lead for a staff of 10 helpdesk employees responsible for the desktop, server/email administrator for 2700 faculty/staff and students. Direct computer lab manager for 300 computers university-wide
- Project leader for all Information Technology projects and technology-related infrastructure updates.
- Level III Helpdesk ticket escalation and direct technology liaison to university executive staff and chair people.
- Created and maintained university computer policy for network usage, helpdesk, and email administration.

### **DIGITAL HIGHWAY INC. | 01/2002 - 03/2003**

#### **System/Network Administrator**

- Network and System Administrator for 150 employees in 15 remote locations, spread statewide in Michigan and Ohio.
- Administration, implementation, and design of unique Windows 2000 Advanced Server configuration with Exchange 2000 Server, Voicemail Server, and telephony phone systems. I designed a wide-area network (WAN) through fractional T1 lines and virtual private networks.
- Responsible for maintenance and administration of Email, Corporate software/hardware, and Unified phone messaging systems. Accountable for day-to-day information technology strategies and troubleshooting.
- Instructed Managers and Sales Personnel with Customer Relationship Management (CRM) software and developed techniques to help drive sales and maintain customer relationships.
- Created Sales and Technology strategies for retail infrastructure; developed and implemented managerial policies that increased the productivity of salespeople and managers.

### **WESTERN MICHIGAN UNIVERSITY | OFFICE OF INFORMATION TECHNOLOGY | 06/2001 - 01/2002**

#### **Junior System Administrator**

- Responsible for customer contact, support, and consultation of all computer-related peripherals and internal components for Western Michigan University students and staff.
- **ADMINISTER AND DESIGN/MAINTENANCE OF THE COMPANY'S WEBSITE AND SERVER SUPPORT LOGS.**
- Developed technology and organizational strategies for faculty and staff to allow fast and efficient computing and support. Junior Team Leader for university technical computer support.
- Team Member that worked with senior administrators to implement a university-wide wireless network; one of the first universities to develop and implement a ubiquitous wireless strategy.

### **NABISCO BISCUIT COMPANY | 04/2000 - 08/2000**

#### **Project Engineer**

- I designed and implementation of various industrial, commercial, and in-house projects. Responsible for contract work and coordination between management, contractors, and employees.
- Financial forecasting and compilation of future industrial, commercial and in-house projects.

- Assisted in the transfer and setup of new IBM workstations throughout the Nabisco plant. Assisted in software and hardware upgrades to current mainframe and workstations.
- Maintained relationships with multiple vendors and created an engineering policy that included more workforce personnel in the design and troubleshooting of various engineering projects.

## **NABISCO BISCUIT COMPANY | 05/1999 - 08/1999**

### **Production Supervisor**

- I am trained in production departments (bakeshop and packaging) to learn all aspects of the bakery manufacturing business.
- Oversaw all aspects of baking, packaging, and distribution of manufactured goods and day-to-day supervision of employees scheduling and maintaining production quotas.

## **EDUCATION:**

### **WESTERN MICHIGAN UNIVERSITY**

Bachelor of Business Administration  
Haworth College of Business  
Kalamazoo, MI  
Graduated: December 2002

Major – Computer Information Systems  
Minor – Computer Science  
Minor – Mathematics  
Minor – General Business

### **DEPAUL UNIVERSITY**

Master of Science  
School of Computing and Digital Media (CDM)  
Kellstadt Graduate School of Business  
Graduated: June 2014

Chicago, IL  
Major: Business Information Technology/  
Master Business Administration

### **NEW YORK UNIVERSITY**

School of Professional Studies  
Artificial Intelligence Masterclass  
May 2024

## **ADMINISTRATION, SKILLS & TOOLSETS:**

### **Microsoft Server and System Technologies**

- Active Directory
- Advanced Threat Analytics
- Azure Active Directory
- Data Protection Manager (DPM)
- DNS/DHCP/DFS
- Failover Cluster Manager
- IIS Web, FTP, and RAS Server
- Microsoft 365 – E3
- Microsoft Exchange Server 2007/2010/2013
- (on-prem server)
- Microsoft Hyper-V 2008r2/2012/2012r2/2016
- Microsoft SQL Server 2012/2014/2016/2019

- System Center Configuration Manager (SCCM)
- System Center Operations Manager (SCOM)
- System Center Virtual Machine Manager (VMM)
- Terminal Server and RemoteApps
- Windows Admin Center
- Windows Server 2008R2/2012R2/2016/2019
- Windows System Update Manager (WSUS)

### **Server, Network & Cloud Monitoring Toolsets**

- DataDog
- Microsoft System Center Operations Manager
- (SCOM)
- Nagios

- Paessler PRTG
- SolarWinds
- Zabbix

### Data Protection

- Code42
- Veeam Backup and Replication

### Virtual Private Network

- Cisco AnyConnect VPN
- Juniper Networks SA2000 SSL VPN
- Pulse Secure Network VPN
- Sonicwall NetExtender
- VeloCloud SD-WAN

### Web Development Platform

- ASP.NET
- Drupal
- Joomla
- WordPress

### Hyper-Converged Computing

- Dell Compellent SAN
  - Dell FX2 Blade System
- EMC VNX & VNXe NAS/SAN

### CyberSecurity

- Automox Patch Management
- CrowdStrike Falcon – End Point Protection
- Kaspersky Labs Antivirus Administration
- Rapid7 Insight Vulnerability Managed Tool
- Symantec Corporate Antivirus Server
- TrendMicro Antivirus Administration

### Next-Generation Firewall and Unified Threat Management

- Barracuda Antivirus and AntiSpam Firewall
- Checkpoint Firewall
- Cisco Pix/2600 Firewall

- Fortianalyzer 200
- Fortinet Firewall
- Proofpoint AntiSPAM
- SonicWall NSA Firewall
- Watchguard Firebox Firewall

### Virtualization Software

- VMware Virtual Server
- VMware ESXi & vCenter
- Microsoft Hyper-V
- Microsoft Hyper-V 2008r2/2012r2/2016

### Data Visualization

- Tableau
- Microsoft PowerBI

### Web Search Optimization

- Bing Webmaster
- Google AdWords
- Google Tag Manager
- Google Web Analytics
- Google Webmaster
- Search Engine Optimization (SEO)

### IT Automation Tools

- Ansible
- GitHub
- Jenkins
- Microsoft Power Automate
- Microsoft Team Foundation Services
- JAMF Apple Management
- System Center Configuration Manager (SCCM)

### IT Service Management

- ServiceNow
- FreshWorks
- Zendesk

- **Programming Languages:** Java, Visual Basic, C/C++, SQL, .Net, Windows Scripting, PowerShell, Python
- **Operating Systems:** Windows 7, 10, 11, Windows Server 2008r2/2012/2012r2/2016/2019, MacOS, Linux (Ubuntu, Red Hat Enterprise Linux, CentOS).
- **Wireless Internet:** Standards 802.11 a,b,g,n (WiFi), Wireless Routing and Access Points, WEP/WAP2 Encryption/Configuration, and Bluetooth. Enterprise Cisco Switches and WAP. Unifi WAP and Management appliance
- **Hardware:** Internal PC Peripherals, IBM AS400 Mainframes, Server Technology, Configuration of Cisco Routers and PIX Firewalls, Checkpoint Firewall, set up of router/switch and telephony applications, PBX boxes, local and wide area network design, Microsoft Windows Server Infrastructure, EMC VNX, HP EVA

5000 SAN, Dell FX2 Chassis and Blade Servers, Dell Compellent SAN, Radius Server, High Capacity High Volume Storage Arrays, Clustered Hyper-V server, High-Performance Computing

- **Cloud Computing:** Amazon Web Services (AWS), Google Cloud Platform (GCP), Microsoft Azure.
- **Technical:** Troubleshooting, Repair/Maintenance, Administration, Project Management.

## **ACCOMPLISHMENTS:**

- Principal Engineering Designer - 1500 sqft datacenter with new APC infrastructure equipment and HP hardware.
- APC Design Datacenter Award
- Elected Board Member of University of Chicago Information Technology Leadership Council (ITLC) 2021 – 3 Year term

- **Primary Project Manager**

2013 – Austin, Tx Office Buildout

2014 – Austin, Tx Infrastructure Relocation project

2016 – Austin, Tx Office Expansion and Relocation (10,000 sqft \$800,000 Greenfield Build)

2018 – Chicago, IL Office Expansion and Relocation (21,000 sqft \$3.5 Million Greenfield Build)

2019 - Austin, Tx Office Expansion and Relocation (15,000 sqft \$1.1 Million Build)

- **Publications**

Co-Author – Principles of Collaboration Engineering. 2<sup>nd</sup> Edition

Storage magazine "Hot Technologies for 2006" Dec 9, 2006

HP Case study on Successful Storage Area Network Deployments – July 10, 2005

Gartner Report and HP on successful Storage Area Network Deployments – July 2006

- **Training**

Microsoft Operations Manager

Qualys Guard

HP OpenView

Symantec NetBackup

HP Systems Insight Manager

Barracuda Anti-Spam and Anti-Virus Firewall

Microsoft Server Active Directory

CrowdStrike Falcon CyberSecurity

12 Year Microsoft Ignite Attendee

Information Technology Infrastructure Library 4 (ITIL4)

- **Speaking & Panel Engagements**

University of Chicago IT Matters Speaker Series: Quantum Computing – (January 29, 2021)

University of Chicago IT Matters Speaker Series: Pritzker School of Molecular Engineering Technology Discussion – (December 2, 2022)

Automox Webinar Series - For Fix Sake: IT Trends Set to Shape 2023 (January 12, 2023)

**The Data Diva Talks Privacy Podcast – Episode 141 (July 2023)**

Innovation Workshop – Oracle Industry Lab - Interactive Roundtable – No Derisk, No Reward. | SESSION FEATURED THOUGHT LEADER (September 16, 2024)

Innovation Workshop – Oracle Industry Lab - Interactive Case History – Mapping Your Digital Product Experience Across the Ecosystem (September 16, 2024)

- **Memberships**

ORCID: 0009-0004-5028-1207

Forbes Technology Council Member

Active Member of Chicago Innovation

Society for Information Management – Chicago Chapter

Association of Information Technology Professionals – Chicago Chapter

Institute of Electrical and Electronics Engineers (IEEE)

Google Scholar – <https://scholar.google.com/citations?user=ftct2wkAAAAJ&hl=en>

Member of the Ancient and Honorable Order of Turtle