# Dr. Patrick Ryan Turner, EdD.

c/o 6164 Wertz Street · Davisburg, Michigan 48350 · cell: 248-625-4321 e-mail:**turner52@gmail.com** 

# **VICE PRESIDENT AND CHIEF INFORMATION OFFICER**

### **EXECUTIVE PROFILE**

Seasoned and results driven technology leader with 30 years of proven CTO/CIO experience focused on relationship based partnering while helping businesses succeed strategically, tactically, and financially. Innovative change agent and problem solver with a passion for technology; skilled at grasping the big picture; conceptualizing, developing, implementing solutions; and partnering closely with all stakeholders. Excels at developing and motivating highly focused teams to successfully meet and exceed enterprise objectives.

- Doctorate in Education from Ferris State University in Community College Leadership - May 2021 - Suma Cume Laude - Cum. GPA 4.0/4.0
- A \$7M+ 2015 complete IT overhaul for Schoolcraft College & 2020 \$6M+ refresh
- Total enterprise virtualization of IT using VMware for Schoolcraft College
- Innovated new technology products for higher ed with industry partners
- Led tier 3 commercial co-location data center design for Schoolcraft College
- Developed & taught Data Center Design and Data Center Ops classes at Schoolcraft
- Lead a three-year next generation classroom project for Schoolcraft College.
- <u>Click to see list of Professional Publications and</u> Presentations,

- Planned and deployed a state-of-theart Enterprise Security Portfolio
- Coordinated a 4000 sqft. /190 rack data room expansion at Liberty Center
- Managed successful SSAE16 SOC 2 and SAS70 type 2 audit for Liberty Center
- Principal SME for a CMMI level 3 certification for Web Elite, LLC
- VP of Product Development and Board Member during IPO of Mechanical Dynamics, Inc.
- Awarded a US Patent while at Schlumberger CAD/CAM
- Highly effective budget and cost control
- Published in journals and magazines
- Managed major software projects for each Automotive Big Three

## **PROFESSIONAL EXPERIENCE:**

### **ELLUCIAN COMPANY, L.P. - CIO for WASHTENAW COMMUNITY COLLEGE**

Ann Arbor, Michigan

October 2023 - August 2024

- Reported to President of Washtenaw Community College (WCC), and appointed member of the Senior Executive Leadership Team, and Presidents Operations Council.
- Repaired relationship with WCC Leadership (primarily the President and Provost COO) through a 30/60/90 day strategy of listening, planning, leading then executing to build a culture of trust across the entire leadership team and faculty union.
- Made significant progress on top two Presidential Strategic Objectives including growth in online learning and progress toward data driven decision making via analytics, AI, and machine learning; While adding mid term, greatly improving relationship between IT and faculty
- Presided over IT and helped construct the largest Ellucian Managed Services (EMS) 5
  year contract renewal worth approximately \$40M which also included a contract to
  migrate from an on-premise Ellucian Banner Student Information System to a SaaS
  model. Requiring a two year project of de-customization, elimination of home grown

- systems, and a centralized API reimplementation of dozens of point to point 3rd party integrations.
- Initiated a strategic process to improve Operational Maturity through continuous improvement of sustainability (process docs & cross training), repeatability (technology agnostic approach to tech stack design), and scalability (burstable cloud design and centralized matrixed staffing).
- Initiated deployment of an ITIL-Based enterprise change management strategy with a Change Control Board, Change Calendars, Change Manager/Director, Business Stakeholder Selection, and Risk Management guidelines.
- Managed Campus Applications, IT infrastructure, Support Operations, Media Services, Security Governance and Operations teams for WCC. One of the largest Ellucian Managed Services (EMS) clients worldwide providing all College IT services and staffing.
- Re-engaged Broadcom/VMware to renegotiate contracts and design a new virtualization infrastructure to facilitate a sequential migration from L2 contested network, to L3 segmented, to SDN (Software Defined Networking) Hybrid Cloud strategy with an aim to implement Cloud First, Zero Trust, Scalable IT infrastructure that represents industry best practices.
- Lead a complete redesign and deployment of IT infrastructure including networking, compute, storage, security, and ISP strategy, with the latest palo alto cloud firewalls, new Cisco 9800 series Core switching, and new Cisco 9000 series distribution and access switching while completely re-IP-ing 50 data closets and two data centers, etc.
- Manage Security Operations including strategy and day-to-day application of a complete portfolio of cybersecurity tools from virus protection to SIEM and advance threat detection tools.
- Managed Cybersecurity Strategy and day-to-day of a full portfolio of security tools from virus protection to SIEM and advanced threat detection tools.
- Saved over \$1M in upgrade costs for power, cooling, and networking by successfully merging two chaotic data center/closet into one.
- Solve a strategic issue regarding dissatisfaction with Ellucian Remote Help Desk via standardizing agent training, knowledge base content, strategically adding FTE staff and remote flex staff, and re-engineering call center menu to route faculty to most senior staff to improve first call resolution stats.

# ACCELERED LLC – VICE PRESIDENT OF INFORMATION TECHNOLOGY & SECURITY OPS Bethesda, Maryland November 2021 – September 2023

- Managed global IT infrastructure & security operations for University Of Maryland Global Campus (UMGC), the flagship client of AccelerEd (division of UMGC-Ventures), and one of the largest US online universities supporting 90,000 students.
- Participated on Executive Staff reporting to the CEO assisting in Strategic Planning, Organizational and Operational Management, and enterprise vision casting.
- Lead complete redesign and deployment of global IT infrastructure including networking, security, and ISP strategy, standardizing ~200 global remote offices across US, Asia, & Europe using cloud mgt. creating a follow-the-sun support model.
- Deploy latest tele-conference room technology featuring "speaker tracking" & integrating Teams, Zoom, and WebEx resulting in the same remote and in-room user experience.
- Managed largest part of a \$35M Global Central IT budget recommending technology, upgrades, maintenance, while eliminating a 60 item long standing executive support backlog and remediating substantial Technical Debt over two years.
- Manage Security Operations strategy and day-to-day management of a full portfolio of security tools from virus protection to SIEM & advanced threat detection tools.
- Managed Security Governance Risk and Compliance and lead a MSSP engagement for development of a new framework agnostic governance program focused on CMMC & NIST SP800-171.

- Manage Server Engineering and Networking for UMGC's Global Azure/AWS Cloud presence (95%+ of all workloads) reducing large technical debt and moving toward a zero-trust cloud-first strategy, with multi region redundancy / availability zones.
- Consolidated and finished migrating to cloud data center services reducing a primary 75 rack site to 5 racks (remaining ~5% for physical office network access/door access mgt./security/mechanicals). Also, decommissioned over 10,000 devices retiring a secondary Data Center/Call Center site.
- Saved over \$1M in support cost by successfully deploying latest DEX (Digital Employee Experience) technology called NexThink® for proactive Desktop/Server Support collecting ~800 data points per minute per device for a fleet of 4500 devices worldwide.
- Mitigated substantial business losses by successfully deploying latest APM (Application Program Monitoring) technology called NewRelic® for all core applications by mitigating potential service interrupting incidents prior to any end user impact.
- Reduced desktop support costs by over \$800K by improvements to password management strategy and process/knowledge base upgrades.
- Manage Desktop Engineering and Support for the Global Enterprise moving to cloudbased fleet management using MS Intune and touchless deployment using AutoPilot.
- Manage Global Help Desk via Stefanini® for Tier 1 and soon Tier 2 and local staff for Tier. 3 support.
- Manage global remote office IT infrastructure and support for US, Europe, & Asia.

### **DEDUCTIVE DATA - OWNER and PRINCIPAL CONSULTANT (SINCE 2000)**

Davisburg, Michigan September 2020 - Current

Client: University of Maryland Global Campus. AccelerEd/Higher Digital April 2021 to Nov 2021

- Position: Acting CIO, AccelerEd (a division of UMUC Ventures) reporting to CEO.
- Enterprise Security Framework consulting for implementation of CMMC (Cybersecurity Maturity Model Certification, a new DoD mandate) requirement.
- Review of Oracle PeopleSoft™ and Anthology™ Student Information System architecture to help define direction forward.
- Global Telephony Strategy and migration from Cisco UCCE™ to Five9™ Contact Center Software Systems Rationalize 63 business user groups and user experience assurance.
- Restructuring global support system via ServiceNow™ satisfy diverse user groups.
- Guidance and consolidation of FY22 IT budget proposals and roll up.
- Oversite and guidance of the IT support organization (AccelerEd) on CEO Staff.

Client: Macomb Community College

September 2020 to Nov 2021

- Position: Virtual CISO Project Work and Security Project Management
- Successful PCI compliance remediation for 2nd largest Community College in Michigan involving process redesign, systems upgrades, PCI Self-Assessment Questionnaire use clarification, and remediation project definition.
- Stakeholder review, analysis, prioritization and project definition for IT system penetration testing findings remediation.
- Led point-of-sale system upgrade design, HW specification, quoting, logistics coordination, vendor management and future implementation project management.
- Led investigation on Privileged Access Management technology, manufactures, coordinating top (Gartner Magic Quadrant) manufacture demonstrations, principal author of full requirements specification and RFP documents including a requirements traceability matrix for future project implementation acceptance criteria.
- Led Cyber Security incident response investigation and remediation planning.
- Review 3rd party incident response remediation findings report, making recommendations and prioritization for a cyber security remediation project.

### **SCHOOLCRAFT COLLEGE - VICE PRESIDENT and CHIEF INFORMATION OFFICER**

- Reported to President and member of Presidents Cabinet fully participating in strategic planning, budget creation and management, operational management, and enterprise vision casting.
- Participant in all Board of Trustee Meetings and managed the IT Budget and Planning Sub-committee. Making IT related updates and proposals to the Board.
- Provided technical vision for Next Generation Classroom initiative embracing "deep learning" and CCCSE student engagement advancements.
- Full technical oversight of all Information Technology Systems and Staff for the college.
- Provide technical vision/strategy to keep college information systems current, highly available, and meeting expectations of our primary client; students.
- In 2014, audited enterprise IT systems where \$10M of upgrade approvals and a complete overhaul of all IT systems resulted including compute, storage, network, carrier services, phone systems, and substantially expanded monitoring and cyber security systems.
- The overhaul also included a total enterprise virtualization of IT using VMware for server virtualization as well as initiated a conversion of 2500 PCs to Virtual Desktop Infrastructure.
- In 2020, replaced entire enterprise Wi-Fi system, more than tripling the number of APs, using latest 802.11ax protocol (Wi-Fi 6), adding four new buildings and Wi-Fi to parking lots aiding pandemic response.
- Pivoted to online course delivery over days, responding to the 2020 pandemic. Moving over 1100 traditional class sections to online. See VMware Podcast at PODCAST.
- In 2019 planned a 5-year Schoolcraft IT infrastructure refresh including a move from blade server compute and SAN storage to hyper-converged vSAN with 100% GPU support for virtual desktops. Leading to improved performance, reliability, and robustness, as well as remote availability, support for demanding video performance, and further improved cyber security.

# SCHOOLCRAFT COLLEGE - EXECUTIVE DIRECTOR OF DATA CENTER OPERATIONS

Livonia, Michigan

January 2014 - June 2014

- Led conceptualization and design of 150 rack commercial co-location data center.
- Design included a CHP (Continuous Heat & Power) generator for data center power.
- The generator was to be fueled by waste natural gas exhaust of a college owned oil well.
- The design and preliminary budgeting were complete and was ready to let out to bid.
- The data center was not built due to financial constraints.
- College Data Center virtualization consolidated 16 racks to 4 racks. 12 empty racks were converted to a mini tier 3 co-location data center with a half-dozen customers.
- Designed, developed, and taught a Data Center Design course.
- Designed, developed, and taught a Data Center Operations course.

## LIBERTY CENTER ONE, LLC. - CHIEF TECHNOLOGY and CHIEF INFORMATION OFFICER

Pleasant Ridge, Michigan

January 2008 - January 2014

- <u>Liberty Center One</u>, LLC is a 20,000 sq. ft. high density and high availability Commercial Colocation Hosting Facility which had 100% uptime during my entire tenure, from April of 2008 to December 2014. The facility can be unofficially characterized as an Uptime Institute Tier Three facility with nearly 1000 clients.
- Contributed to all major pre/post-sales activities and 100s of tours to prospective clients.
- Led the design, documentation, and implementation of controls/processes, and then was the principal Plante Moran Audit Team contact, leading a successful 2010 SAS70 Type II Audit. Uniquely, not requiring a Type I Audit, with a Type II audit with no exceptions!
- Technical operations leadership including physical and logical services provided.
- Evaluated technical requirements for all major prospective clients, recommended solutions and guided implementation for major facility deployments.

- Partnered with Telecom Carriers providing facility networking infrastructure, specify and implement client private pt2pt, MPLS, etc. circuits.
- Led implementation, support, and maintenance of all major infrastructure including:
  - 1. DTE primary power distribution through a private GE 2.5MW transformer
  - 2. Backup power system by two 750KW Kohler diesel generators and Kohler paralleling switch gear
  - 3. Uninterruptable Power Supply system by a 750KW MGE and a redundant 625KW Liebert UPS
  - 4. Monitoring of over 100 channels of data via a digital data acquisition system for every major mechanical device or system. Designed to provide remote web-based viewing, email alerts, SMS pager alerts, and automated phone dialing alerts.
  - 5. Dual Russelectric 2000 Amp Automatic Transfer Switches.
  - 6. Networking Services provided by a Cisco infrastructure including four Cisco 6500 enterprise class routers. Monitored using an extensive implementation of Cacti, Zabbix, and Nagios SNMP style monitoring.
  - 7. Cooling systems including eleven 30-ton Liebert System III CRACs (Computer Room Air Conditioners) supported by a web-based temperature monitoring and alert system.
  - 8. Security Systems including Prox card readers and biometric door access system backed-up by a system of CCTV cameras connected to motion activated DVR system. 24/7/365 remote alarm monitoring.
  - 9. Fire Suppression provided by FM200 inert gas system (avoiding water-based systems possibly leading to IT equipment damage).
  - 10. 24/7/365 Monitored fire alarm system.
- Occasionally led system selection, design, and implementation, particularly for monitoring.
- Liberty Center hosts major applications for GM, Ford, Chrysler, and several other Fortune 500 Companies.
- Provided high level technical leadership of and Able Team.

# WEB ELITE, LLC - CHIEF TECHNOLOGY OFFICER and CHIEF INFORMATION OFFICER Pleasant Ridge, Michigan April 2002 - December 2007

- <u>Web Elite</u> markets Web-enabled enterprise business systems and provided technical leadership for all Programs, Projects, and Product Development. Provided technical vision & high-level tactical direction, for all business and technical processes.
- Provided leadership of all technical staff.
- SME Lead for implementing process improvements and attaining a CMMI Level 3 rating for Web Elite. (CMMI is Carnegie Mellon University's "Capability Maturity Model Integration" process improvement model) then required by General Motors and aligned with GM's SDP-21 process.
- Led the effort to gain a Ford Tier 1 vendor number for Web Elite.
- Provided design and technical guidance conceiving and winning a Point-Of-Sale Video Marketing System Program planned for installed at North American Daimler Chrysler Dealership Service Centers.
- Served as principal force, turning around a non-profitable relationship with General Motors leading to follow-on business with GM and led to restructuring of Web Elite and General Motors organizations.
- Initial assignment was to design from process-flow-diagrams and implement 20+ Webbased business applications for ZevXchange, LLC; a multi-million-dollar electric car business; saving General Motors, Inc. tens of millions of dollars.
- Conceived a product and led development of a Web-Based-Training system and series of courses creating new business with Ford's Corporate Quality Development Center.
- Provided leadership designing and implementing a digital video production studio supporting Web Elite's eLearning course content creation projects.

- Principal leading turnaround of several trouble accounts including Carhartt Clothing, GM SPO (Supplier Parts Operations), and Accident Fund.
- Ensured solutions were differentiated through intuitive and efficient business process analysis and mapping. Providing technical solution aligned with business client vision.
- Oversaw replacement of legacy information systems, using both off-the-shelf solutions, or completely custom systems for Web Elite Clients as needed.
- Oversaw all technical resource allocation, billability, hiring and termination.

# AAWUA, LLC - INDEPENDENT MANAGEMENT CONSULTANT, MANAGER, and OWNER Clarkston, Michigan 1998 - 2003

Opened a consulting practice, creating various entities and businesses. Providing:

- Software development consulting for Pulte Home Sciences and Torvec, Inc.
- Beta Testing and developed user documentation for SIMMs(tm), a high security encrypted internet chat and e-mail system.
- Financial systems research (i.e., Created sections of http://www.new-shore.com, a financial education site on investing due diligence).
- Mechanical systems simulation engineering expert witness consulting (Torvec, Inc.).
- Marketing and sales of legal services (Pre-Paid Legal, Inc., Attained Director in 3 months.
- Personal investment portfolio management, real estate speculation, and marketing financial educational material.

# MECHANICAL DYNAMICS, INC. - VP, PRODUCT DEVELOPMENT from 93 on, & prior DIRECTOR, INTERFACE PRODUCTS

Ann Arbor, Michigan

August 1989 - December 1997

- Helped promote Mechanical Dynamic Inc.'s (MDI) worldwide virtual prototyping software leadership. Helped guide MDI to a CAGR of 30-40%.
- Managed a multi-million-dollar budget.
- Led a company-wide team implementing a complete restructuring of 15 core software products (some FORTRAN written from 1977).
- Cultivated / maintained effective customer, distributor, and third-party relationships.
- Part of a management leadership team who positioned MDI for an IPO.

#### As Director I:

- Turned around a failing graphical post-processing package; ADAMS/Post and delivered on time and on budget.
- Introduced the use of graphical modeling for MDI's Mechanical System Simulation software via design and creation of ADAMS/View pre/post processing system.
- Led a team who introduced Parametric Modeling and a programmable user interface to the main simulation product ADAMS (Advanced Dynamic Analysis of Mechanical Systems).
- Responsible for adding optimization methods and DOE (Design Of Experiments) methods into the modeling and simulation control environments.
- Assisted marketing with collateral development, demonstration systems, and technical presentations.

#### SCHLUMBERGER TECHNOLOGIES CAD/CAM - ENGINEERING MANAGER

Ann Arbor, Michigan

March 1986 - August 1989

- Provided technical leadership for a collection of MCAE software including: FE Modeling, FE Analysis, ADAMS Interface, Linkage Synthesis, FE Shape Optimization, Piping Schematic Design, and NC Machining CAD Geometry Tagging.
- Awarded a US patent, with others, for new Linkage Synthesis work.
- Managed development plans, product specifications, documentation, release process, customer and field support, resource planning and scheduling.

- Provided marketing with business plans, collateral development, sales training and guidance, field training, technical presentations, etc.
- Developed and delivered many technical MCAE presentations across the US and Germany, Sweden, Switzerland, Italy, France, Japan, Korea, etc.

# CHEVROLET - PONTIAC - CANADA GROUP - SENIOR PROJECT ENGINEER 2.5L ENGINE DEVELOPMENT GROUP

Pontiac, Michigan

January 1985 - March 1986

- Implemented use of dynamic simulation for 1987 2.5L valve train development.
- Implemented Fourier cam design techniques.
- Managed FEM (Nastran) optimization of valve train components.
- Oversaw funding and coordination of UC Berkley university valve train dynamic behavior research.
- Managed dynamic experimental analysis of valve trains.
- Coordinated "Variable Valve Train" research at Ricardo Engineering, England.

#### PONTIAC MOTOR DIVISION OF GENERAL MOTORS - PROJECT ENGINEER

Pontiac, Michigan

June 1981 - January 1985

<u>Engineering Analysis (sixteen months)</u>: Performed acoustic, vibration, and modal analysis of vehicle structures primarily to improve vehicle interior noise. These analytical and experimental analyses involved intensive use of instrumentation and computers.

<u>Structural Analysis (eleven months)</u>: Classical and finite-element-method analysis of automotive systems (including body, engine, and suspension components) to provide design direction.

<u>GM Fellow at Massachusetts Institute of Technology (eighteen months)</u>: Acquired a MSME degree and performed vehicle dynamics research.

### **EDUCATION:**

## Ferris State University - Big Rapids, Michigan

Degree: Doctorate in Community College Leadership

(May 2021)

<u>Dissertation</u>: Technology Improved Campus Safety: Wireless Network-based Campus Police Incident Response, Person of Interest and Witness Identification, Potential Victim Protection, and Contact Tracing.

Honors and Awards: Suma Cume Laude - GPA 4.0/4.0

#### Massachusetts Institute of Technology - Cambridge, Massachusetts

Degree: Master of Science in Mechanical Engineering

(1985)

Thesis: Quasi-Static Analysis of Four-Wheeled Vehicle During Combined Maneuvers

Honors and Awards: General Motors Fellowship

### Michigan Technological University - Houghton, Michigan

Degree: Bachelor of Science in Mechanical Engineering

(1981)

Honors: Graduation with High Honor Distinction, President of Tau Beta Pi - Michigan Beta Chapter, Phi Kappa

Phi and Pi Tau Sigma

Awards: Forging Industry Educational and Research Foundation Scholarship, Marathon Electric

Manufacturing Scholarship, Michigan Tech Student Fund Scholarship.

### REFERENCES:

**Upon Request**