PETER L. IERARDI

**CTO / Inventor**

[**peter@softev.com**](mailto:peter@softev.com)

**603-566-0542**

https://www.linkedin.com/in/peterierardi/

# SUMMARY

Proven technical leader blending skills and insights of CTO, Lead Engineer/Architect, Cloud/SaaS Expert, Agile Coach and Program Manager. Extensive experience with AI/ML, mobile and cloud delivery platforms, designing, coding and delivering cutting-edge products and services for global and local industries. Create, mentor and run Agile Scrum teams and architects to prototype, validate, develop and deploy new technologies in an Agile SDLC.

# SELECTED ACCOMPLISHMENTS

* Transformed R&D Private Equity QIS applications into Product delivery, introducing scalable architectures and building commercial product management team.
* Delivered US and UK based white-label SaaS fantasy gaming platform, adding 70,000 new users and a new racing association with a variety of different events and live video feeds.
* Delivered a disruptive, self-directed and digital advice SaaS trading platform on AWS to large and small-scale investment firms. Increased production instances from 2 to 107, grew Engineering team from 1 to 21 FTEs and grew AUM by 10x to $2B in a CTO role.
* Led development of a disruptive IoT/Cloud SaaS / AWS-based application for the building automation market, named as co-Inventor and awarded a US Patent for this product, installed by Brookline, MA, Cape Cod Hospital.
* Delivered an AWS Cloud/SaaS medical history application with secure storage services, US Patent pending.
* Delivered a scalable incentive compensation software platform in a combined CTO/VP Engineering role, resulting in the ability to sell into much larger clients, resulting in 20M in new ARR in Y1.
* Delivered a SaaS/AWS /Azure / Oracle Cloud Fleet Management project in a Tech Lead role moving local business into major national markets and to elevate the business to $300M in revenue.
* Delivered a large team of senior engineers to create a new modern Cloud delivery platform for a $2B revenuebased product and service offerings.
* Delivered a cutting-edge 6 Sigma medical office management startup integrating Telemedicine and workflow to streamline medical office visits and Dr. utilization.

# APPLICATIONS DEVELOPED

* Open AI Whisper / GPT 4.0 Index based Technical Recruiting application
* AI / ML Document ingestion engine based on AWS Comprehend
* AI Rules Engine for controlling workflow for an Auto/Truck leasing platform
* AI Rules Engine for managing workflow for an online mortgage processing platform.
* AI Implementation of Case Based Reasoning, Model Based Reasoning and Decision Tree diagnostic application platform.
* AWS FINRA/SEC Regulated Cloud Platform for SaaS Digital Advice Trading application
* AWS HIPAA Compliant Cloud Platform for SaaS Patient Medical History application
* AWS Cloud Platform (PaaS), open-source web farm for Insurance applications
* AWS Cloud SaaS IoT for remote building automation management
* AWS Cloud SaaS for medical IoT device prescription dispensing device
* Azure / Oracle Cloud .Net SOA/Cloud Fleet Management applications (SaaS)
* .Net WPF/C#/C++ Interop Mission Planning application
* Azure Cloud .Net/C#/SignalR/Jquery/Jscript Medical Office Graphical Workflow application
* .NET WCF / GPS / Cell-data Onboard Trucking Logistics distributed system, NHTSA Certified
* .Net WCF/C# Cell Phone Number Authentication Service
* .Net WPF/WCF/C# Credentialing Application with DHS Interface
* AWS Cloud .Net 4.0/ wireless cell-data medicine monitoring application.

.Net 4.0 WCF Secure Credentialing/Driver’s licensing systems with legacy interfaces

* .Net 3.5/WCF/SOA/AJAX Instant Online Quoting system for Parts Prototyping Company
* .Net SOA 3.5/ 3.0/WCF/WWF dist. Sales Automation/CRM System for Retail firm 1000 users
* .Net Winform/ 2.0 / CF Distributed Navigation GPS/ Tech service application (800 users)
* .Net/ ASP.Net Banking Forms Intranet System
* Java/J2EE Intranet/N-tier SOA Radio Signal Interference Monitoring and Equipment Control
* .Net Intranet/Distributed Radio Signal Interference Monitoring and Equipment Control
* .Net Target/Record Cataloging System for Law Enforcement
* .Net SOA Banking Incentive Management and Tracking System and Teller Interface

# EXPERIENCE

## HarbourVest Partners, Boston MA July 2023 to Present

### VP of Quantitative Investment Science

* Responsible for overhauling and rebuilding QIS Data Platform for variety of QIS applications (Portfolio Manager, Market Analytics, Fund Manager, GP Insights) , ingesting internal and third party Private Equity fund performance data and integrating proprietary forecast modelling.
* Transform and Lead the productization effort for creating a globally available QIS Application platform, on MS Azure cloud, including introducing microservice architecture and design and converting QIS R&D into Product centric software development and delivery.
* Transform cost center R&D (10m/yr) into Profit center (30m/yr) product development division of HVP.
* Identify reference architecture for new platform cloud environment in Azure.

## StableDuel, Lexington, KY Oct 2022 to Present

### Chief Technology Officer/Chief Information Officer

* Equity partner, CTO for fantasy horse racing ADW gaming platform startup with live production customers, working directly with founders.
* Responsible for technology development to bring game to the UK market, UKGC and GDPR compliance, GAMSTOP integration and other compliant technologies. Launched game in Q3 2024 producing 10x revenue and 20x profitability gain.
* Wrote corporate policy on data security, incident management, disaster recovery, and compliance.
* Built and managed replacement technology implementation team, establishing Agile SDLC, coding and QA standards.
* Cloud environments are in Azure Cloud and AWS in a distributed zero trust architecture, Postgres, MSSQL, Dynamo.
* Built net-new Web app and native mobile platforms: iOS (Swift) and Android (Kotlin).

## Techscreen, Inc. , Mansfield, MA VP of Engineering March 2023 to May 2024

* Equity partner, VP of Engineering directing next generation, disruptive AI enabled interview scoring application for the Tech recruiting market.
* Hands-on Architecture, Design and development while leading an AI software engineering team and an integration team (both offshore) to generate a new version of Techscreen.
* Technologies used: **OpenAI GPT 4.x, OpenAI Whisper**, AWS cloud, Python, Ubuntu, MySQL, Flask, Python, Django.

## Fusion IQ, Woburn, MA July 2020 to Sep 2022

### Chief Technology Officer/Chief Information Officer - Full Time Employee

* CTO for a trading platform SaaS software startup, working directly with CEO and investors/board of directors to develop and deliver white-labelled and customized solutions.
* Responsible for development and delivery of next generation Self Directed and Digital Advice Trading platform for Equity, ETF, Mutual Fund, Crypto, Privates and Alternative investment instruments on an AWS/Containerized environment.
* Converted development team from 15 contract, 18 FTE (from 1) and 3 contract engineering staff in 12 months, managing multiple onshore and offshore teams. 21 direct reports.
* Drove live customers from 2 to 107 in 18 months while reducing operating expenses by 33%.
* Rolled out 25 major client implementations worth $2.5M in 2021 and 87 clients worth $6M in 2022 and $2B in AUM.

Responsible for creation of Information Security Policy, Data Loss Policy, Disaster Recovery Plans, Business Continuity Plans and SOC2 compliance.

## ODIN Building Automation Systems, Nashua, NH Jan 2016 to July 2020

### Chief Technology Officer

* CTO for industry disruptive SaaS/IoT application for the building automation control industry.
* Named on and awarded patent and working directly with CEO/founder, responsible for strategic direction, design and development of Cloud/IoT based SaaS offering for automating building management (HVAC, lighting, energy management, security, etc.).
* Architect, design and code application for AWS Cloud, extensibility, scalability and future expansion of functionality and mobile platform offerings. Utilizes BACnet and secure Internet protocols for communications.
* Employ Agile/Scrum methodology to manage local and offshore development teams to produce MVP, and additional software releases for testing and certification.

## LifeBook/MedBlob, Boston, MA Dec 2018 to May 2020

### Chief Technology Officer – Startup Equity Partner (Part time)

* Delivered prototypes and MVP for ground-breaking next generation patient medical history SaaS/Cloud application on AWS for general public use.
* Named as Inventor on patent-pending as architect, designer and managing technical team developing LifeBook,
* Built web and mobile apps that met HIPAA and PHI security and compliance.
* Designed and coded AWS Comprehend AI/ML based document ingestion engine for medical history documents.

## AgilePath, Newburyport, MA Jan 2016 to December 2016

### Contract Fractional CTO (Part time)

* Delivered world class cloud migration security and strategy for F500 and government entities.
* Efforts included proprietary high data security, PHI, HIPAA and Medical Device Compliance.
* Clients included Baxter/Baxalta, Shire Pharmaceuticals, and USDA (US Gov’t).

## Homesite Insurance, Boston, MA Dec 2014 to Jan 2016

### Sr. Program Manager/Sr. Principal Architect

* Delivered SaaS/Cloud integration application to major insurance partner GEICO, under budget and on schedule, creating $150M in new revenue for 2015.
* Led team of senior engineers to create a PaaS platform (PaaS) to support $2B revenue base.
* Used Agile/Scrum methodology and direct full-time staff to successful delivery of project.

## Merchants Fleet Management, Hooksett, NH Dec 2013 to Dec 2014

### Sr. Project Manager / Sr. Principal Architect-Engineer

* Delivered large Fleet Management and Leasing application project hosted on Azure Cloud and Oracle Cloud.
* Utilized WCF/C#/SQL Server/.Net 4.5 using Jscript/JQuery/Angular for browser-based web UI.
* Project designed to elevate the business expanding into new markets to capture $300M in new revenue.
* Implemented AI Rules Engine for workflow control of Auto/Truck Leasing platform.

## MorphoTrust / L1 Secure Credentialing, Billerica, MA Oct 2009 to April 2013

### Sr. Project Manager / Sr. Architect, Principal Engineer, Team Leader, Mentor

* Designed and coded a DHS interface utilizing .Net 4.0/WCF/WPF to communicate demographic information.
* Responsible for 2 US State driver’s license implementations which include customization of a core product using a plugin and workflow model in an SOA architecture.
* Designed and coded in .Net 4.0/WCF/C#/VS 2010/SQL Server 2008R2 for Windows Server 2008R2 OS.
* Employed Agile methodology from requirements through QA to UAT/Pilot in the customer’s environments.

## Software Evolution, Inc. , Amherst, NH

### Sr. Principal Architect **Feb 2004 to June 2013**

Clients: *Codem Systems, Inc., DCS, Inc.*

* Technical leader on design, coding, implementation and mentoring a large-scale Fleet Management project. Responsible for connectivity and interfaces to Oracle OnDemand, COMDATA PCI Webservices and ChromeData on project that delivered $300M in revenue.

Worked with VP of Engineering and CEO, to restructure the engineering department to accommodate open source / n-tier development, recruiting, staffing, retaining, and running a team of 20 Senior-level J2EE and Oracle software engineers and 6 SQA engineers. Delivered next generation project to allow business to grow into new markets.

* Managed a team of 31, direct reports included, team project managers and 26 additional personnel (Analysts, PMs, Dev and QA)
* Assumed CTO role for startup business in Cambridge, MA focused on delivery of restaurant throughput-based incentive system, guiding cloud-based implementation.
* Onsite member of Telcordia NH team to design / architect / develop SOA initiatives for Telcordia’s total software offerings.
* US Department of State and FAA projects for Codem Systems.
* USAF TAWS mission planning software for DCS, Inc.

## PC Connection, Inc., Merrimack, NH Oct 2007 to June 2009

### CTO/Director of Development /Team Lead/Senior Software Architect/Engineer, Mentor

* CTO/Director of Development/Team Lead for large team of developers (started as onsite senior member of development team) for SOA/.Net 3.0/ WCF-based Sales Automation/CRM system for 800 concurrent sales representatives.
* System is a mission-critical cutting-edge application written in latest Microsoft technologies.
* Responsible for architecture / design / coding / code reviews / design reviews / mentoring both contract and fulltime staff of up to 20 developers and QA engineers. Wrote .Net 3.0 C#/WCF SOA Services, Winform/MVC based UI, SQL Server 2005 database objects, search engines and workflow engines.
* Mentored both Senior/Mid/Junior level engineers to ensure design and code quality.
* Worked within SCRUM methodology using modified-Agile development lifecycle techniques.
* Senior Architect / Engineer for a .Net 2.0 C# Winform/CF application for mapping/GPS/ Navigation and tech service job routing.
* Code included visualization internationalization and remote resource assembly management.

## Wintellect, LLC. Dec 2000 to July 2006

### .Net Software Architecture and Engineering, Mentoring

* Provide top-tier consulting services on an as-needed basis software design, development and troubleshooting expertise to Wintellect’s clientele.
* These services include phone and onsite consultations for various software development and production related issues such as performance improvements and design verification for n-tier, distributed enterprise and clientserver-based architectures involving various technologies such as .NET/C#/ C++/MFC/ATL/COM, OLEDB, ODBC, Win2k, and SQL Server 2000 RDBMS’s.

## RSA Security, Inc., Bedford, MA Oct 2003 to July 2004

### Senior Software Architect, Principal Engineer, Mentor

* Design and develop a next generation Enterprise Single SignOn – Secure Smart Card Authentication System targeted to large scale customers.
* Incorporates latest in security technology (SecurID Keyfob, 5100 SmartCard to 6200 Keyfob), biometrics and SSO techniques. Mentor in C++ and .Net/C# development to full time staff as well.
* Integration with .Net based SSO client and C++/J2EE server.

## WPI DecisionKey, Manchester, NH 2003

### Senior Software Architect, Principal Engineer, Mentor

• Responsible for new coding/design/implementation of AI Case Based Reasoning component of WPI DK’s suite of products.

## Homeshark/CitiBank Loans, San Francisco, CA 1999

### Senior Software Architect, Principal Engineer, Mentor

• Design and Development of AI flexible Rules Engine for mortgage processing workflow engines for automating the routing of online loan applications.

## AI Squared, Inc. Merrimack,NH 1995

### Principal Software Engineer/Architect, Mentor

Responsible for coding/design/implementation of AI Case Based Reasoning, Model Based Reasoning and Decision Tree AI application platforms.

## The Analytic Sciences Corporation, Reading, MA 1989-1993

### Senior Software Engineer

* C/C++/SQL DB/Oracle/Windows SDK engineering and development for various Government and DOD projects.

Clients included US Army, USAF, US Navy, T.Rowe Price and commercialization of technology.

* Human Factors UI engineering.
* High volume data ingestion and manipulation for large scale USAF systems.

# TECHNICAL PROFICIENCIES

## Development Environments

* **Win:** VS .Net 2019, .NET Core, SOA/WCF, WPF, AJAX Toolkit, ASP.Net, MVC 4/3, ADO.Net, C#, C++, VB.Net, Win 10/8/7/Win2016 Server, ATL, MFC, COM, Platform SDK, JDK, WinSock/IrSock, Zlib, IBM MQSeries
* **Unix:** nginx, Linux, WebLogic 6.0, J2EE, JMS, EJB, JDBC, ANT, Struts, Tomcat, BEA MQ
* **Web:** Chrome Dev Tools, JavaScript/JQuery, HTML
* **Mobile:** Ionic/Angular/Typescript/Jscript/Jquery IoS, Android based tablets (Samsung, HP, ASUS) \
* **Cloud:** Kubernetes / Containers, Amazon AWS (Serverless Aurora, RDS, VPC/VPN, EC2, EBS, ELB, Multi AZ/Region, WAF, Shield), MS Azure, Oracle Cloud Applications
* **Networks:** TCP/IP, Windows Servers, SMTP gateways, RPC, IPV6, Elastic VPNs
* **Protocols/Security:** TLS 1.2, SSH2/Ciphers, WebSockets**,** WCF/Net.Tcp, HTTP, WSDL, SOAP, TCP/IP, XML, XSLT, x.509 Certs, OFX, Kerberos, AD, WinSock, HTTPS, Named Pipes, MAPI, UUEncode, LDAP
* **Databases:** MySQL, Entity FW, NHibernate, SQL Server, LINQ, ADO.Net, PostgresSQL, OLEDB, ADO, ODBC, Oracle, JDBC, Sybase, DAO
* **Software:** JetBrains Dev tools, Space, Azure DevOps/TFS/Application Insights, GiT, GiTHub, nuGet, JIRA,

Trello, Slack, Visual Studio Suite, NANT, NUnit, XMLSpy, Numega DevPartner AD, LDAP, SVN, ANT,

Perforce, Xerces DOM, Intellipay E-Commerce Gateway, SourceSafe, SQL Server Tools, Graphics Server SDK, Oracle Tools, Auto Test Tools

* Secret Clearance through DISCO

# EDUCATION

**Bentley College**

B.S. CIS, A.S. MGMT

## Boston University

### M.B.A./IS {Significant courses toward degree.}