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| Zac Fermanis  SOLUTIONS Engineer /ARCHITECT  Holly Springs, NC  207-232-4106 | [ZacFermanis@gmail com](mailto:zacfermanis@gmail.com) [zacfermanis.com](https://zacfermanis.com/) | [linkedin.com/in/zac-fermanis](https://linkedin.com/in/zac-fermanis) | [github.com/zacfermanis](https://github.com/zacfermanis) |
| **EDUCATION** |
| **2017 Boston University Boston, MA**   * MS in Computer Science with Concentrations in Security and AI   **2007 University of Southern Maine Portland, ME**   * BS in Computer Science, Minors: Mathematics, Economics |
| **PROFESSIONAL EXPERIENCE** |
| **2017 - Present | *Solutions Engineer* Remote**  **Liberty Mutual** - Corporate Functions - Talent and Enterprise Services   * Named Corporate Functions AI Champion, advising Senior Leadership and Enterprise Architecture on AI strategy and implementation. * Established best practices and security guidelines for Agentic Coding, including the creation of multiple MCP servers to accelerate application development. * Provided architectural support for Talent and Enterprise Services, a department of **150+**   engineers.   * Architected, designed, and led implementation of “Concierge,” an award-winning intranet portal centralizing feedback management, performance evaluations, and merit/pay administration— resulting in **$5M+ in annual savings**. * Authored high-profile architectural strategies, including:   + Fine-Grained Authorization using OPA   + Micro-Frontend Architectures   + Microservices Architectures   + SuperGraphQL Data-flow * Produced department-wide North Star Architecture diagrams and Reference Architectures; * Certified LeanIX practitioner. * Mentored junior developers and contributed to a High-Performance Engineering culture. * Led design and development of a DEI portal to improve accessibility and **reduce IT support call center volume by a measured 36%** in first year. * Led architecture and implementation of a company-wide overhaul of the Performance Ecosystem, leveraging Micro-Frontends and SuperGraphQL architecture. * Orchestrated cross-functional “Game-Day” exercises to enhance performance engineering and site reliability practices. * Enabled distribution of **37,000+** annual bonus statements in a single day with an **error rate under 0.5%**—the **largest volume in company history.** * Finalist (2nd Place) in the 2022 company-wide Hackathon (3,000+ participants).   **2016 - Present | *Chief Technology Officer - CoFounder* Remote**  **Elegant Elephant Travel**   * Oversaw all technical operations and strategy, enabling **$1M+ in annual revenue** with a lean infrastructure footprint of **less than $5K in annual operating costs.** * Designed and developed a high-performance, SEO-optimized eCommerce website with full social media integration: **elegantelephanttravel.com.** * Built and integrated automated workflows using TravelJoy.com APIs and additional travel CRM/ portal tools to streamline client and itinerary management. * Created and deployed multiple AI-driven automation tools, including:   + Automated Daily Email Summarizer   + Follow-Up Detection System   + “Ask My Inboox” natural language inbox assistant   + Itinerary [Validator for catching](https://elegantelephanttravel.com/) typographical, logistical, and geographical errors in 3rd- party vendor documents |

**2012 - 2017** | ***Principal Software Engineer***

**Liberty Mutual** - Enterprise Technology Services – Security Delivery

# Dover, NH

* Led architecture, design, development, system administration, and release engineering for a portfolio of 5 enterprise-wide systems and **35+** supporting applications.
* Supported high-scale J2EE n-tier applications serving **5M+** customer accounts and **50K+**

employee identities across the organization.

* Reduced release cycle overhead by **over 60%** by scripting and automating previously manual deployment and maintenance tasks.
* Refactored legacy systems to support hot-swappable configuration changes, eliminating downtime and enabling more agile deployments.
* Provided architectural guidance and technical leadership to multiple development squads; mentored junior developers to build internal engineering capabilities.

**2010 - 2012 | *Software Developer***

**Liberty Mutual -** Products & Distribution Applications Development

# Dover, NH

* Contributed to the successful release of a refactored Auto Insurance sales platform (GEARS), serving as the jQuery Subject Matter Expert (SME) for the front-end team.
* Served as lead developer and UI/UX designer for the Personal Liability Protection (PLP) sales application, a high-visibility initiative within the organization.
* Collaborated in an enterprise Java environment using IBM Rational Application Developer (RAD) and Rational Team Concert (RTC) for development and source control.

**2005 - 2010 | *Senior Programmer Analyst***



**Citigroup -** Applications Development

# Boston, MA

* Led multiple integration initiatives under the Model Office (AIS Portal) program to onboard the newly acquired Bisys Group into Citi's infrastructure, including upgrading and re-engineering several .NET/ASP applications to align with Citi's Information Security Standards and enterprise policies.
* Served as Lead Developer for XSP (SWIFT/FPML) processing projects at CDIL, implementing the SWIFT API using Java/J2EE and acting as Subject Matter Expert (SME) for integration workflows. Spearheaded knowledge-sharing efforts to train peer developers.
* Led all trade processing and reporting integrations for BGI (Barclays Global Investors), delivering scalable Java/J2EE and .NET applications using SWIFT, MQ, and SQL.
* Engineered systems capable of processing **1M+** transactions per minute, supporting over **$5B**

in daily Assets Under Management (AUM).

**2000 - 2002 | *Quality Assurance Engineer***

**Compaq Computer Co. / Hewlett Packard -** StorageWorks - SANSOFT

# Shrewsbury, MA

* Designed and executed network testing scripts for high-availability SAN systems.
* Tested across IBM Shark/DS4400, Solaris, Red Hat Linux, and Windows Server.
* Utilized Fibre Channel connections for multi-platform validation.
* Analyzed and documented test results to ensure system stability.
* Ensured cross-platform performance and compatibility compliance.

# PROFICIENT LANGUAGES/PRODUCTS/FRAMEWORKS/CONCEPTS

**Front End:**

* React, Next.Js, Vue, Vite Angular

**Back End:**

* Node
* Java/J2EE

**Concepts:**

* Agentic Coding w/ MCP servers & Memory Banks

**Utilities:**

* NPM/YARN/PNPM
* CVS/SVN/GIT
  + HTML5/XML/
  + .NET (C#, VB, J#) ➢ Well-Architected Framework
  + Github Actions

JSP/ASP

* + CSS/SASS
  + Javascript/

Typescript

* + jQuery
  + Groovy/Grails
  + Htmx
  + SQL (pSQL)
  + Go
  + Rust
  + Spring Boot
  + Python
  + Serverless
  + AWS CDK
  + Kafka
  + High Performance Engineering
  + Networking/Network Security
  + Neural Networks / Artificial Intelligence /

Machine Learning /Genetic Algorithms

* + C4 Diagramming
  + Big Data - Hadoop/Hive
  + AWS/Azure/Google Cloud
  + OIDC / OUauth2 Flows
  + Cloud: AWS, LK8s, OCF, Vercel, Google
  + K6 Load Testing
  + Bamboo/Bamboo Specs
  + Maven/Gradle
  + Ab Initio, Informatica (ETL)
  + LeanIX
  + PowerBI
  + NeoVIM