* Passionate about driving organizational value through software
* Demonstrated, consistent success as a dev, lead and architect
* Innovation-driven and customer-focused
* Proven history of system-based, complex problem solving and critical thinking to drive results
* Cross-industry, cross-functional, cross tech stacks and toolsets
* Passionate advocate for people-first management, UX, lean/agile, collaboration and lifelong learning

**Frameworks and Tools**

* Angular, JavaScript, JQuery, assorted tooling
* .Net Core, .Net framework, ASP.net MVC, Web API, ASP.Net, C#
* Python, SpaCy, NLTK, Gensim, Anaconda
* Sql Server, NoSql, Graph Db, ORMs including Entity Framework, NHibernate, Dapper
* AWS, Azure

**Architectures**

* SPA, REST, APIs, OO, SOA, Microservices, MV\*, Message-driven, Distributed

**Process and Methodology**

Agile: Kanban, Lean, Scrum, XP, DevOps

**PROFESSIONAL EXPERIENCE**

**Aureus Tech Systems 3/2019-1/2020**

Design and prototype next-gen functionality for cloud-native eDiscovery tool to drive insights and analysis from large corpus of unstructured data. Among the prototypes were natural language processing-based document clustering, named entity recognition, sentiment analysis and topic mapping, as well as graph based data structures and visualizations leveraging word mapping and relational graph charts based on Azure Cosmos Graph DB data structure. Technologies included Python, SpaCy, Gensim, NLTK, amCharts, Azure Cosmos Gremlin interface, Azure Cognitive Services, Azure Machine Learning Services, .Net Core, Azure Functions, Azure Web apps.

Design and prototype data integration and loading functionality for an cloud-native eDiscovery product in Azure. Prototypes included moving and transforming data from raw zip and CSV files into structured data in Azure SQL Server and document stores in both Blob storage and Azure VMS. Technologies included a range of Azure services.

Collaborate with, guide and mentor off-shore development teams in software architecture, Azure, web-based and machine learning technologies.

**Orthofi 4/2018-2/2019**

Lead a team in a successful rewrite of core subsystem used for client accounting and billing. Design focused on creating an extensible base for the organization to grow and expand customer offerings. Project touched all systems in the org and foundationally changing the way the organization charges it's clients. Systems involved included several Angular single page apps, a Web Api-based api, an Asp.Net MVC app, .net cron services, as well as the core data structures of the company.

Won the 2018 company hack-a-thon by creating a web application that leveraged the Google Vision Api to translate an image of an insurance cards into business-specific data points to be fed into the internal system workflows. App allowed the user to upload an image, which was fed to Goggle Vision. The resulting output was then parsed and mapped to business specific forms for further processing.

Independent Consultant: Vail Resorts – 4/2017-1/2018

Splitting time between several architecture projects and assessments, and supporting a development team enhancing point of sale systems. Architecture work includes assessments, system design, and application development around API security, PCI compliance automation through and ecosystem architecture. Tech stack includes latest version .Net development (4.6) and Angular 1/2/4 applications.

**Imagine Communications 6/2014-1/2017**

Member of a team developing a scheduling engine for media advertising, leveraging Google’s Constraint Engine for optimization. Business and design activities included defining a mathematical model of the problem space, mapping of constraints, weighting factors and relationships to define optimal solutions, and architecting pre-and-post engine processors to abstract structuring the problem space and mapping its relationships to the business domain. The application leverages data from an external broadcast advertising traffic system, and integrates to update this external system with the optimized solutions. Architecturally, the application is designed to encapsulate the core engine functionality, independent of the pre and post processing sub-systems and external application integrations. This creates reusability for the engine across disparate traffic systems, leveraging injectable repository and processing subsystems. An MVC UI layer provides an optional, independent UI. The toolset included C#, Google OR tools, ASP.net MVC, ASP.net Web API, Dapper. The application can be deployed either on-prem or in a cloud-based deployment leveraging a distributed, message-based execution model, leveraging Azure for hosting, data and queueing.

Member of project team creating a next-gen platform for management of media advertising workflows, the alpha of which won a Best in Show award at North American Broadcast trade show in 2015. SPA leverages Angular(1.x), HTML5, Bootstrap and Kendo UI to create a highly scalable application, with a fully responsive user interface, targeting tablet and larger form factors. .Net-based service layer uses restful architecture and cloud-based storage to create a scalable and flexible foundation. Server-side toolset includes C#, nHibernate, Azure SQL, Service Stack, PLINQ and Automapper.

Team lead and architect for 2 teams of 3-5 people, working on separate modules of the above application. Responsible for technical designs, domain modelling and collaborating on redesigning workflows and user experience. Collaborated with BA and product owner to define functional requirements in an extremely complex and challenging business domain. Led integration effort for all 5 teams working on the application, as well as external system integrations. Additionally, led teams in Scrum process, including: leading sprint planning, tech reviews and retrospectives, and mentoring junior team members.

**RBA 7/2011-4/2014**: **(Example of projects during this period): Developer 12/2011-8/2013**

Implemented an SPA and ASP.net MVC rest service learning module. Functionality included integrations with other internal subsystems, such as testing, survey and reporting functionality, as well as course content and external systems to administer examinations. RESTful web services utilized Microsoft MVC framework to surface application logic and persistence layers. SPA front end utilized Dojo JavaScript framework and assorted other JavaScript libraries to provide rich application and presentation logic on client.

Additional projects during this period: Numerous other projects across diverse set of clients. Projects leveraged a wide set of technologies, including (but not limited to): vanilla JS, JQuery, ASP.net, ASP.net MVC, Web API, Web Services, SQL Server, Azure and SharePoint, and integration with a number of external systems. The clients ranged across a number of business fields, and roles included architecture, integrations, analysis, and development.

**Freelance 2006-2011:** **(Example of projects during this period): Enterprise Architect 2/2010-5/2011**

Architected and developed an enterprise framework to integrate legacy systems, such as Aspect work flow management, Lawson HR system, Avaya CMS, Microsoft Active Directory and Taleo recruiting modules, among others. Architecture was a hub and spoke design, utilizing Biztalk 2006 R2 as an ESB and translation engine. Each legacy system was wrapped with a custom .Net application, to simplify and standardize interactions, as well as abstract away the legacy system's complexity. Each wrapper paired with a .Net application which functioned as an observer for the legacy systems, allowing the spoke and hub to function bi-directionally. Integration was done via direct http calls, custom database drivers, ADSI and LDAP. Wrappers surfaced via WCF, using Entity Framework to create an audit data store of changes for SOX compliance.

Designed a “repository-of-record” to support transactional systems, as well as service-based support layer to supply custom applications and framework with configuration management, validation and business rule management. Data repository is surfaced through a SOA WCF layer. Data repository includes both a real-time transactional database and non-updatable audit database to track changes.

The system handles all enterprise data integration and system communication for a multinational corporation with roughly 10,000 employees. This automation replaces manual processes from nearly every corner of the organization, removing significant duplication of effort among departments. In addition, it removes a multitude of manual audit processes, effectively streamlining the entire organization and generating significant cost savings.

**EDUCATION**

**Bachelor of Arts,** UNIVERSITY OF NOTRE DAME