

SFL Scientific is a data science consulting firm focused on strategy, technology, and solving business & operational challenges with Artificial Intelligence (AI).

Working with clients of all sizes, industries, and Al maturity levels, our capabilities range from developing Al strategy to building custom Al applications at scale. Hundreds of clients—including S&P100 enterprises, fastest-growing startups, and government agencies—trust SFL Scientific to create and accelerate Al initiatives. With a globally connected network of technology and cloud partners, SFL Scientific's core services include leading cross-functional efforts across business, IT, and operations.

AT A GLANCE

Key Facts

FOUNDED

2015

HEADQUARTERS

Boston, MA, US

WEBSITE

www.sflscientific.com

KEY PARTNERSHIPS

NVIDIA, Microsoft, Cisco, NetApp, Pure Storage, HPE

TEAM

US-based Ph.D. data scientists, AI engineers, technical consultants, & R&D experts.

CLIENTS

Providing strategy and AI services to utility, oil & gas, & other industrial organizations with novel computer vision, NLP, time-series, deep learning, and software solutions.

What sets our strategic & Al services apart?

01

Fully US-Based Technical Team

Multidisciplinary team of PhD data scientists & AI engineers providing services, comprehensive solutions, and governance throughout the organization.

02

Powerful Ecosystem, First Mover

Recognized by NVIDIA, Microsoft, AWS and other major IT & engineering organizations as a consulting partner that integrates diverse solutions—SFL Scientific is the 2018 & 2019 [current] NVIDIA AI Services Partner of the Year.

03

Custom Development

We create custom solutions addressing specific business needs to generate operational and R&D outcomes. We understand the full AI lifecycle including data management, DevOps, and AIOps.

04

Strategy & Technology Rights

Trusted advisor and development partner to executives, helping them understand and evaluate essential areas for investment. Client retains all strategy, code, and IP rights.



Trusted by Leading Organizations Worldwide



















































































SFL Scientific & Microsoft Azure

MACHINE LEARNING ON AZURE

Azure is a robust service that covers the development and deployment needs of businesses across the world, Azure Machine Learning is the cloud-based service model that gives Enterprises the ease to integrate Data Analytics solutions with AI capabilities on the go. The model is self-intuitive and enables one to build AI applications faster and easier. The beauty of this platform is the fact that it can gel with any or all kinds of products and offers the flexibility to deploy feature-rich models at a pace faster than ever. With Azure machine learning, you have access to some of the most advanced machine learning capabilities, including build, train, and deployment learning models that can streamline your work system in no time.

SFL Scientific a member of the Microsoft's Al Inner Circle Program. Our team of Ph.D.-level Data Scientist are capable of harnessing the power of the Azure platform to develop novel solutions to your enterprise problems. As a Cloud Platform, Application Development & Data Analytics Competency Partner, SFL Scientific is uniquely qualified to help organizations address their Al strategy, develop custom algorithms, deploy scalable architecture and manage enterprise grade Al / ML solutions. The SFL Scientific team background in STEM subject and Boston location has afforded us the opportunity to work with many leading healthcare and life science organizations.

Gold Microsoft Partner



Cloud Platform

Application Development

Data Analytics



Al Workshop: Overview

What can a customer gain from the workshop exercise?

Connecting AI Technology to Business Value

- Comprehensive Data Strategy and AI Roadmap
- Address Business Challenges
- Use Cases Identification
- Short and Long-term Business Objectives

Client Outcomes

Data Assets Review	Defined Success Metrics	Capabilities Assessment
Infrastructure Evaluation	Leadership Education	Solutions Roadmap

Enable organizations to see <u>how AI can deliver increased value</u> to the organization.

Custom Al & ML workshops to accelerate Al adoption and improve performance.



Al Workshop: Goals & Participants

Who should participate and what are the expectations?

Typical Organizational Goals for Artificial Intelligence

- Creating New Business Models, Products, or Services
- Monitoring of Key processes, Assets, or Expenditures
- Study User, Client, or Patient Behavior to Informs Future Solutions
- Increased Workforce Efficiency and Reduction in Operating Costs

Target Audience

Business Unit Leaders	Operations Analysts	Technology Evangelists
Data Scientists	IT Leadership	Strategy Executives

Designed to engage <u>technical and non-technical individuals</u> to generate insights and strategies to leverage Al against the organization's strategic priorities.



Al Workshop: Process Overview

How does SFL Scientific organize the workshop process?

Data Science Resource Meeting (1 Hour)

- Meet with Customer Data Science Resources & Business Stakeholders
- Evaluate Current Data Assets & Identify Potential Use Cases

Infrastructure Technology Meeting (1 Hour)

- Meet with the Customer Infrastructure Technology Team
- Evaluate Hardware, Software, and/or Cloud Environments

Workshop Meeting (2 Hours)

- All Relevant Customer Stakeholders in Attendance
- Review Findings on Objectives, Use Cases, and Related AI Topics
- Present Recommendations for Future Projects and AI/ML Approaches

Business Value Conversation (1 Hour)

- Answer Final Questions on Findings & Recommendations
- Scope Services Around Identified Use Cases



Al Workshop: Deliverables

What materials does the client receive?

SFL Scientific will Develop the Following Deliverables

- Digital Recordings of Each Meeting
- Organized Minutes from Each Meeting
- Presentation from Workshop Meeting
- ☐ Written Summary of Workshop Exercise for Executive Review
- Proposal for First AI-Related Project

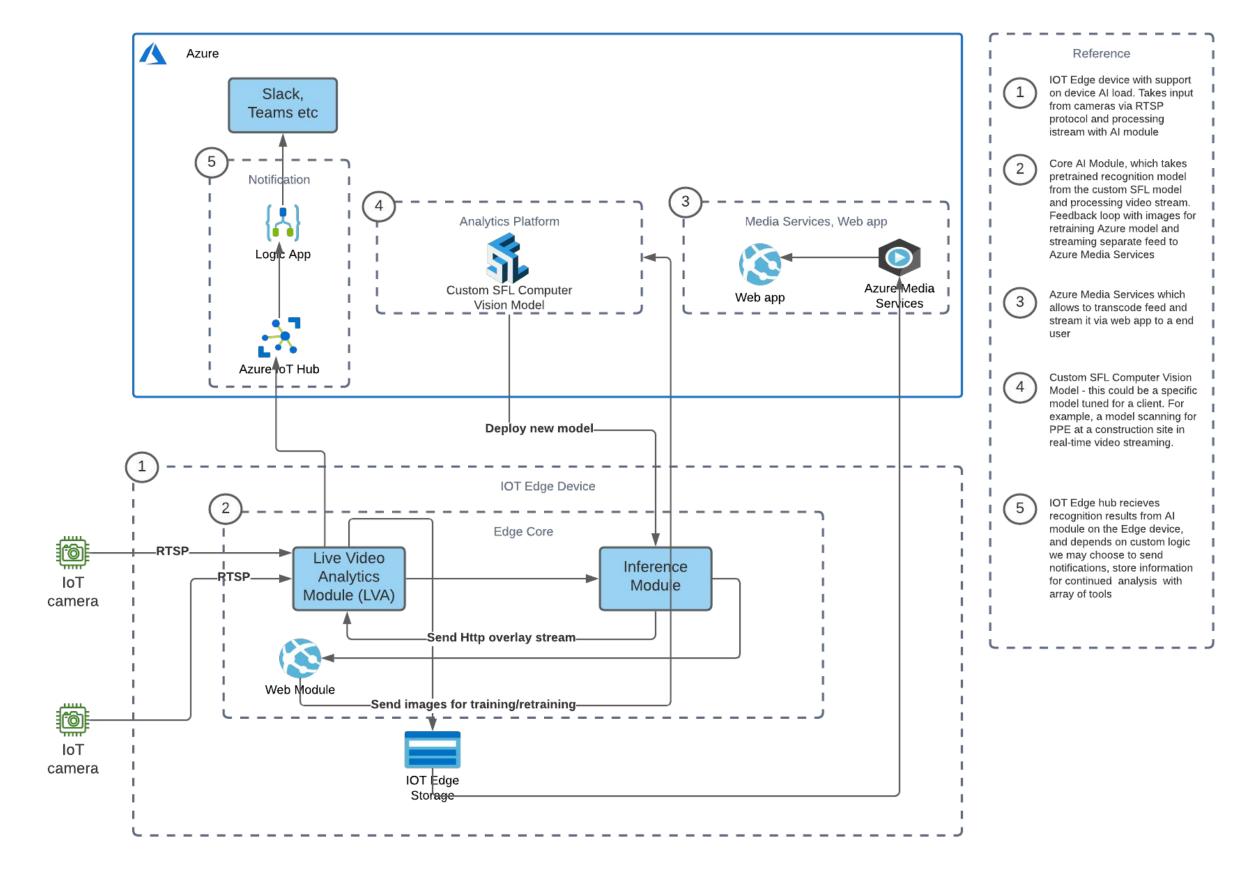
Optimal Client Outcome

The end state of this exercise is for customers to better understand their current capabilities, and infrastructure with a defined roadmap for opportunities to apply AI within their organization. A concrete starting point for data strategy, data science work and opportunities for investment at the company.



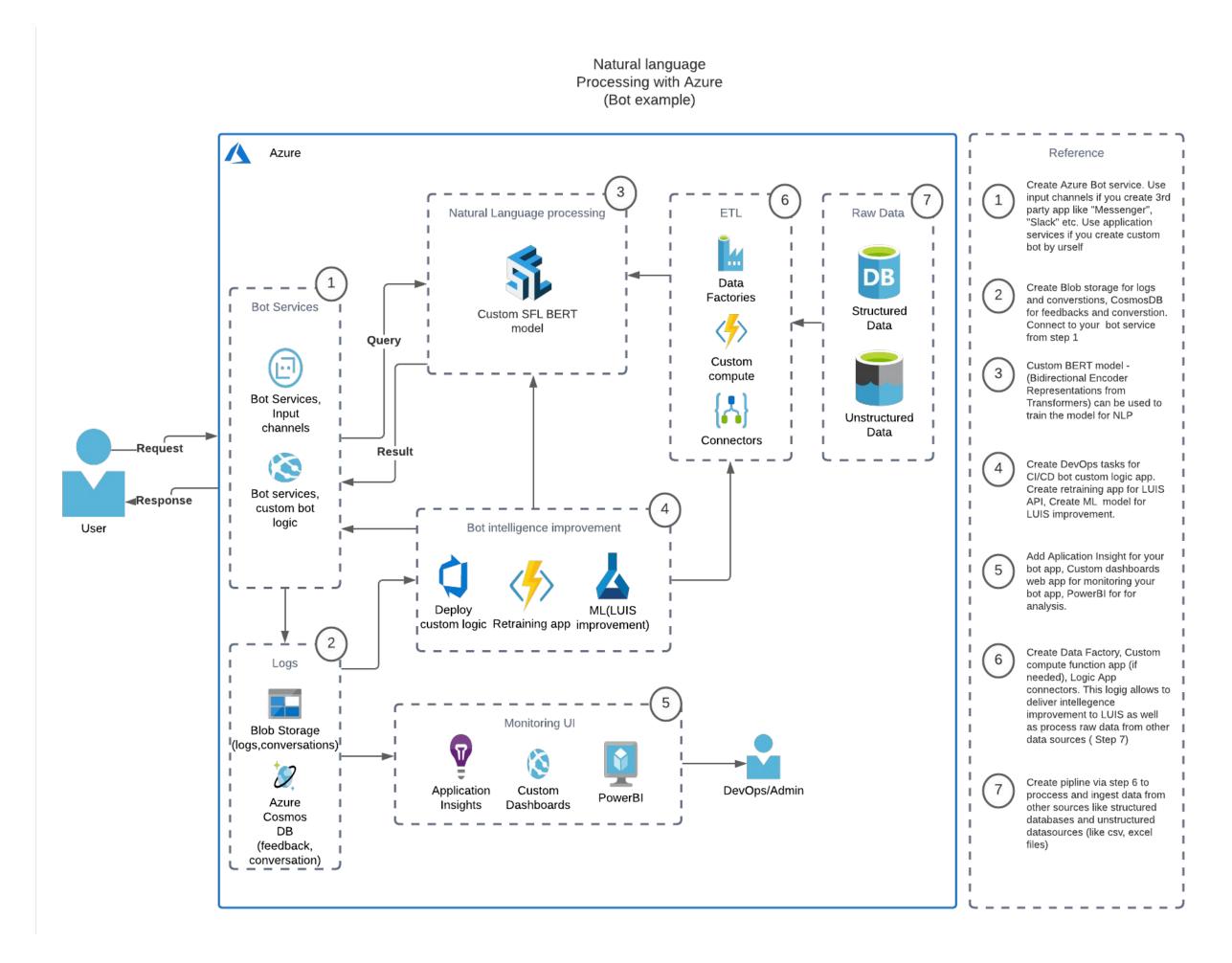
Al Workshop: Architecture (Computer Vision)

Computer Vision with using of Azure Edge





Al Workshop: Architecture (Natural Language)



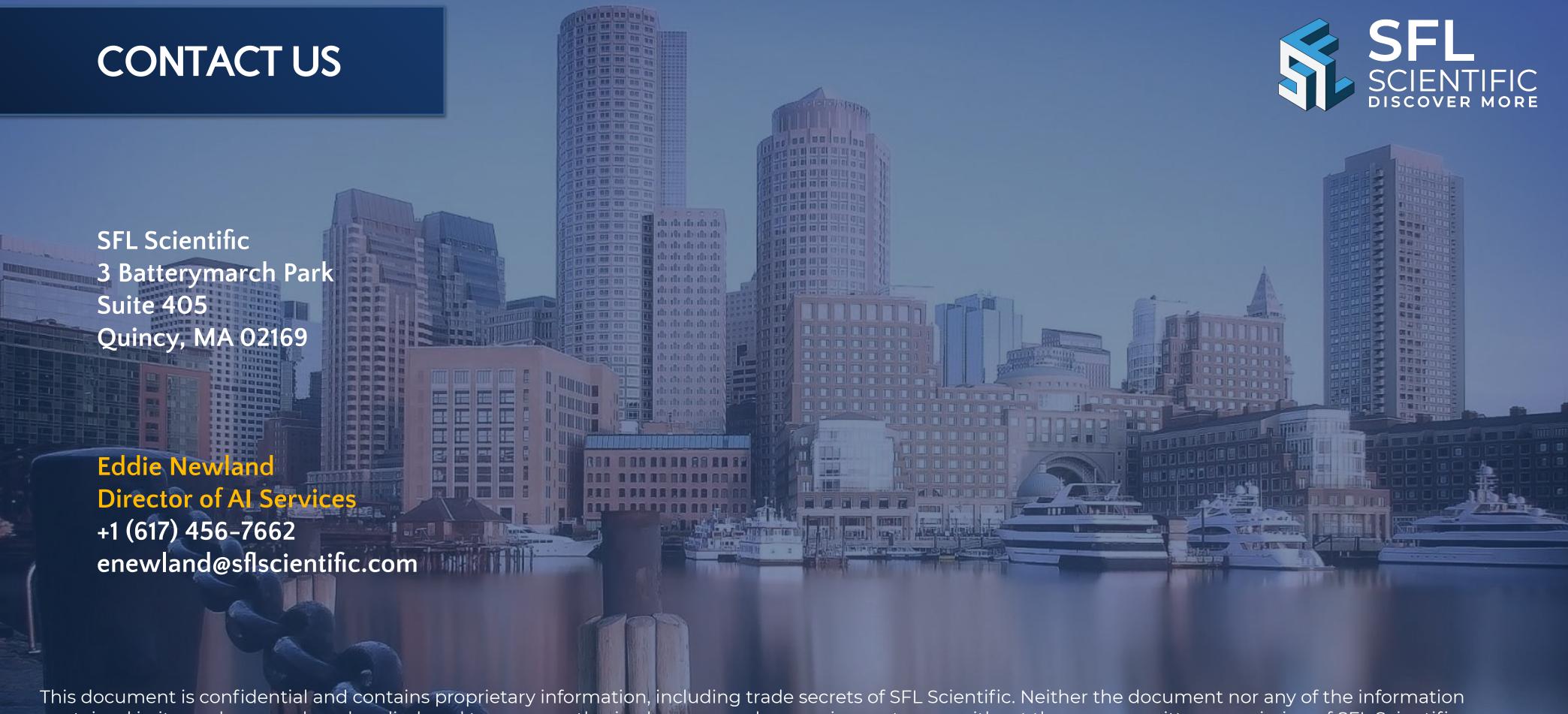


Al Workshop: Architecture (Time Series)

case Azure Reference 2 Physical devices placed inside [Device group] of the building. Generated data Presentation layer accomulates at Device Real time analytcs Gateway and transfered via MQTT protocol Stream IoT thing ! Create Azure IOT hub for **Analytics** generic connecction with remote Jobs for devices via MQTT protocol Hub [[Time series PowerBI real time dashboards Create Stream Analytics service and specifiy Input and output. Input will be IOT Hub, IoT thing App Service Output - Function App and camera PowerBI. Supply real time analytics code (Time series) in Data trasnsormation Create Azure Fucntion App for data transformation and Analytics trigger. Function will MQTT Azure IoT Hub write to a CosmosDB collection Storage Create Azure CosmosDB for Business logic processed data and Blod App (enpoint to Cold Blob storage for raw flow. serve user Azure Cosmos Storage for DB For warm request) raw IOT | Custom SFL Arima model storage (Auto Regressive Integrated Moving Average) model trained from blob data to forecast future values. Stream outcomes to analytics platform. Custom SFL Create PowerBi service and connect it to a Stream Analysis output. Create custom app to query data from CosmosDB we created in step 5

Generic IOT use





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