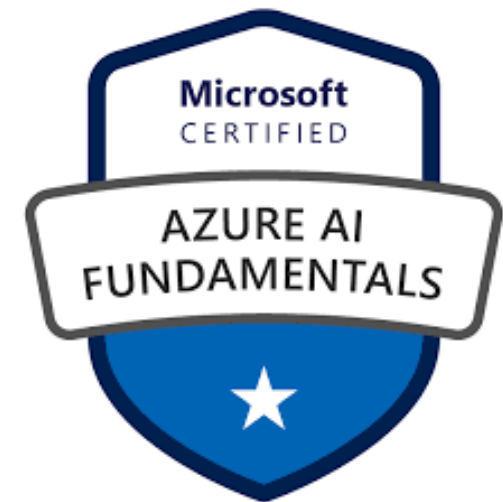# Machine Learning in Azure – Cognitive Services

About me

- Principal Data Scientist @ Ingram Micro

- 13 years of experience in Analytics, Reporting and data engineering/ 3 years in Cloud

- Organizer at Azure Developer Communities – Tamil Nadu

- Microsoft Certified - Azure and AI Engineer

- LinkedIn: https://www.linkedin.com/in/navaneethan-gopal-9b101612

- Twitter: https://twitter.com/NavaneethGopal

Agenda

Welcome Note

Azure Cognitive services - Entity extraction

Sentiment Analysis

Language Detection

Resources

Conclusion

Pre-requisites

- Target Audience:
Level: Beginner
The session is intended for developers and beginners who are new to Azure Cloud, Machine Learning and have experience in NLP.

- Azure account, Jupyter Notebook and Power BI

- No Machine Learning experience required

Azure Cognitive Services

Build smarter, more engaging experiences with knowledge & intelligence services from Microsoft
Give your apps a human side

Vision	Speech	Language	Decision	Search
• Computer Vision • Customer Vision Service • Face	• Speech Service	• LUIS • QnA Maker • Text Analytics • Translator	• Anomaly Detector • Content Moderator • Personalizer	• Bing News, Video, Web, Custom, Entity, Image, Visual Search

What are Azure Cognitive Services?

Azure pre-trained AI Services provide ready-made intelligence for your applications and workflows.

AI Services easily integrate with your applications to address common use cases such as personalized recommendations, modernizing your contact centre, improving safety and security, and increasing customer engagement.

AI Services on Azure don't require machine learning experience

Why Microsoft Cognitive Services ?
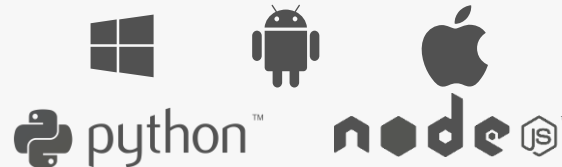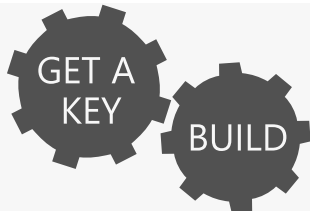
Easy

Roll your own with REST APIs

Simple to add just a few lines of code required

Flexible

Make the same API code call on iOS, Android, and Windows

Integrate into the language and platform of your choice

Tested

Built by experts in their field from Microsoft Research, Bing, and Azure Machine Learning

Quality documentation, sample code, and community support

Do's/Don't

Check

- Check the Azure Resources/Services cost before give a try

Clean up

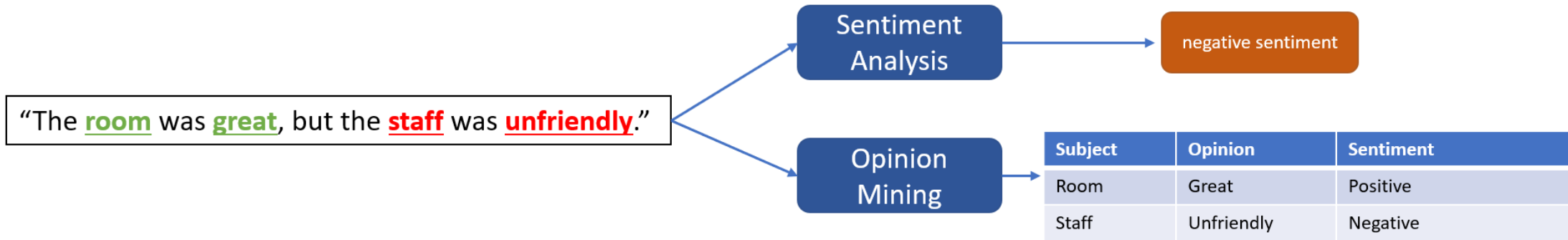- Always clean up the unused resources

Don't share

- Don't share the key with others

Demo

Sentiment Analysis Vs Opinion Mining

"The **room** was **great**, but the **staff** was **unfriendly**."

Sentiment Analysis → negative sentiment

Opinion Mining →

Subject	Opinion	Sentiment
Room	Great	Positive
Staff	Unfriendly	Negative

Customer Feedback Analysis

- We are getting insight about their requirements, pain points by doing sentiment analysis and topic generation.

- It help businesses to improve customer satisfaction and reduce churn.

- We can create a benchmark on customer satisfaction, ease of doing business.

- We are able to go in detail about dept/BU, region/country, customer segment.

Learning Resources

- Azure free account:

https://azure.microsoft.com/en-in/free/

- QuickStart:

https://docs.microsoft.com/en-us/azure/architecture/data-guide/technology-choices/natural-language-processing

- What is Azure Machine Learning?

https://docs.microsoft.com/en-us/azure/machine-learning/overview-what-is-azure-machine-learning?wt.mc_id=AID3035581_QSG_PD_SCL_547447

Open for QnA

Thank you

Machine Learning in Azure

Using Azure ML in Jupyter notebook

January 29, 2022 - 11 AM to 1 PM

- Azure Cognitive services - Entity extraction

- Sentiment Analysis & Language Detection

- Demo - Customer feedback analysis by topic/text extraction, sentiment classification, and translation.

Navaneethan
Principal Data Scientist

INGRAM MICRO

13+ years of experience in Data & Analytics.