



Conversational AI

Revolutionizing the Information Age



Utsav Shah

Business Head - APAC & Europe

Shaip

- Background
- When they started the AI journey
- How has the journey been so far?



Founded
2018



Clients
50+



Employees
160+



Offices
**USA, India,
Singapore**



Offerings
**Data Licensing, Data Collection,
Data Annotation**

About uniphore



Founded
2008



Total Funding
\$620.9 M



Employees
800+



Offices
USA, India,
Spain, Singapore,
Israel, Japan



Offerings
**Conversational AI & Automation for Contact
Center, Emotional Intelligence for Sales**



Aravind Ganapathiraju

VP, Applied AI - Uniphore

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How is Conversational AI
different from other forms of AI



How Conversational AI is different?

AI algorithms struggle since Human knowledge is vast & the language is complex

Voice search, unlike text-based search is complex

- **Accents**

(e.g. British English - Scottish, Welsh, Northern Irish)

- **Pronunciation**

(e.g. Pizza)



- **Emotions & Sentiment**



- **Sarcasm**

(e.g. When someone does something wrong
Sarcastic Tone - Very good; well done!)



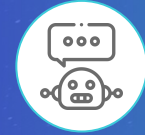
How have organizations across the globe adopted Conversational AI?



Adoption

Industries that are leveraging Conversational AI

- Contact centers
- Enterprises with focus on self service
- Enterprise AI with knowledge base



Self Service Bots/IVR



Voice-enabled
Personal Assistants



Agent Assistance in
Contact Centers



Role of Data in Conversational AI & the Challenges faced in Data Sourcing?



Role of Data

Availability of accurate, precise, & useful data is a necessity to train a AI model; however



Quality of Data



Quantity of Data

- Data that is inaccurately collected would make AI models inaccurate & unpredictable
- It takes **2-3** months of effort to unravel the causes of why a model was doggedly inaccurate
- **Outcome: 20%** poor quality data derailed the model. Removing the data improved model quality & accuracy by over **20%.**

Challenges faced in Data Sourcing

- Open Source Data
- Hire Interns
- Buy the Data

1. Open Source Data

- a. Lot of Data
- b. Rarely fits the purpose
- c. Commercial usage restrictions
- d. Exaggerated Quality

2. Let's hire interns & get data annotated or transcribed

- a. There is more to it than just having bodies
- b. Finding resource after few languages would be hard
- c. Need for project management
- d. Poor quality data
- e. Long delivery timeline

3. We have the budget, let's go buy the data

- a. Expensive may not be high quality
- b. Buying data will also take time
- c. Multiple vendors - Not all eggs in same basket

How good is good data and how do you quantify?

Quantifying Good Data

Data is only as good as the model that uses it & Models are only as good as the data that they are build with.

Data quality can only be measured by the success of the AI Model.
However, 3 qualities of good data that you can rely on are:



Consistency



Accuracy



Data Bias



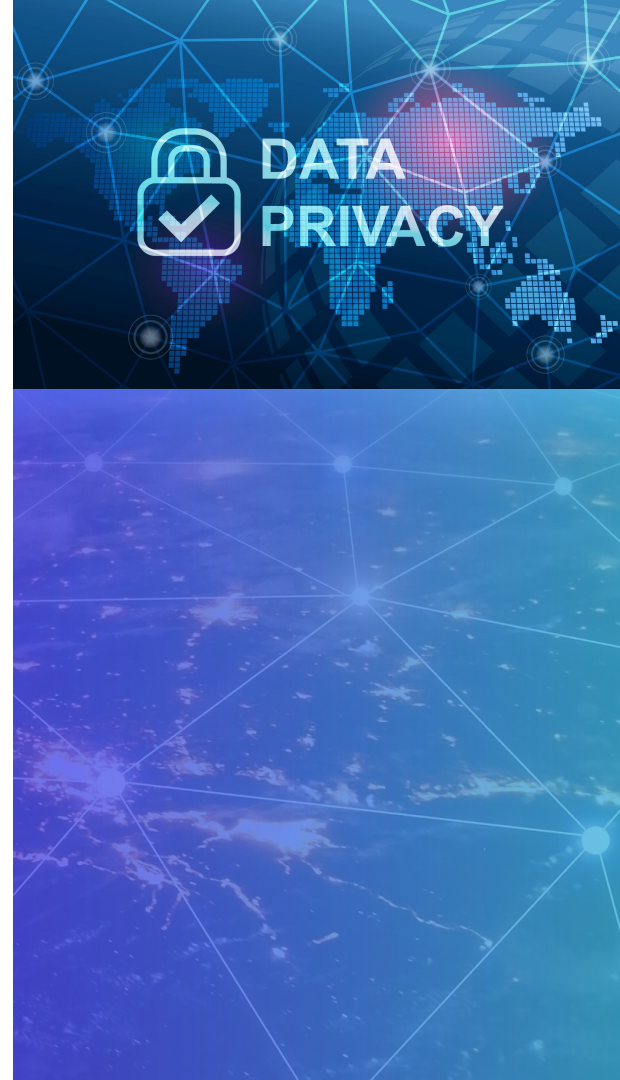
Domain Coverage
content, demography,
data diversity

Regulations & Govt policies in Conversational AI



Overcoming Regulatory Roadblocks

- **Data Privacy** hinders AI model development.
- We work on processes & tools that allow for data curation in secure environments
- Our partners also adhere to high standards of data privacy
- Our modeling approaches such as semi supervised & federated learning - reduce the impact of restrictions from data privacy





Tell us more about Shaip &
Uniphore's Collaboration





Collaboration

- Uniphore is focused on **high-quality** AI data
- Most of the data comes from explicitly curated corpora (takes lot of time & expense)
- Partner with someone who has the experience and can be trusted
- We liked samples from Shaip's Data catalog, after which the partnership was expanded



Collaboration

- We acquired OTS datasets for ASR modeling (non-Indian languages, Arabic & Tagalog)
- Several transcription projects in Hindi & English. Some of the Key project challenges:
 - Real-world data from contact centers
 - Specific guidelines set by Uniphore
 - Domain specific languages
 - Complex project with tight timelines.
- Overcoming key project challenges
 - Regular Quality checks & Feedback loops
 - Streamlined process to automate future delivery



How Uniphore & Shaip are a Natural Fit?



Collaboration

- Uniphore is an Ideal customer as they build great Conversational AI solutions
- They understood the essence & effort it takes to create & annotate high-quality data; whereas
- Shaip provides high-quality data (data collection platform, processes & global workforce)
- Ingredients for a natural partnership.

uniphore 



 shaip



Q/A



Thank You



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