Conversational AI

Revolutionizing the Information Age
About Shaip

Utsav Shah
Business Head - APAC & Europe
Shaip

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

Offerings
- Data Licensing, Data Collection, Data Annotation

Founded
2018

Clients
50+

Employees
160+

Offices
USA, India, Singapore
About Uniphore

Aravind Ganapathiraju
VP, Applied AI - Uniphore

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

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

Founded
2008

Total Funding
$620.9 M

Employees
800+

Offices
USA, India, Spain, Singapore, Israel, Japan
How is Conversational AI different from other forms of AI
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?
Industries that are leveraging Conversational AI

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

Adoption

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?
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

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?
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
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.
Thank You

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