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Founder and CEO Adople AI

(Previously known as Infinity.AI)

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Portfolio companies we worked with:

StoriBoard London (<https://storiboard.co.uk/>) Jan 2023 to Mar 2023

- Storyboard is a UK-based social network platform, for finding people with the same experience.
- We implemented an AI-based video editor, to create a transcription and clean the video
- The crux of the algorithm is the Open AI whisper model (large v2), this model can create transcription for multiple languages. Remove filters and silent parts of the video.
- We can edit the transcription of the video to edit the video.
- Analyze the sentiment of the video.
- Generate topics discussed within the video and a summary of the transcription.

The technology stack used:

- 1) Open AI whisper model to generate a transcription of the videos.
- 2) Stable whisper to generate word level timestamp for the videos.

- 3) Moviepy to crop, clip, and concatenate the videos.
- 4) Streamlit to demonstrate the application.

Sample Code Base:

<https://colab.research.google.com/drive/1OWLpGyKRolXQELEUbqVp8jYUyHLNM9Ka?usp=sharing>

Urgentem London: <https://www.urgentem.net/> Mar 2021 to Jun 2022

Urgentem:

- Urgentem, is the award-winning provider of emissions data and climate risk analytics to the finance industry. **Urgentem is acquired by Intercontinental Exchange** <https://www.theice.com/index>

Product and target customers:

- Our product is called Element 6. **I contributed to the NLP module of Element6.**
- **USP of our product** - The government of different countries are implementing strict environmental policies for companies. As result, **asset managers (Target customers)** are looking at ways to evaluate and optimize their portfolio of companies on an environmental basis.
- Our product takes a portfolio of companies as Input and analyzes the everyday news data for these companies and declares an Environmental score.
- Based on the Environmental score of these companies Asset managers will optimize their portfolios essentially to decrease losses.
- Well-experienced in integrating climate risk factors in quantitative risk models.
- Statistical modeling and DeepLearning Models.

Technology stack:

- We achieved it using topic-specific sentiment analysis. A combination of text classification on environmental topics and sentiment analysis.
- **For text classification**, we worked on different deep learning techniques and finalized on Keyword model, ESG BERT, and BERT model (with our training dataset)
We had 26 environment labels, and we classified each sentence of the news data into different topics.
- **For the sentiment analysis model**: The zero-shot classification model (BART) was implemented as a pre-trained model from Facebook.
- The results are stored in MongoDB (NoSQL).

Product Pipeline

- We had a news vendor called Datanews.io for news feed on different companies.
- News Feed -> Preprocessing -> Sentence wise Topic classification model -> Sentiment Analysis Model.
- All the classified results are stored in MongoDB and retrieved back from the DB whenever required.

The sample code base:

- 1) <https://drive.google.com/drive/folders/1EmJMUvw-Wytge7JbuGmG6cPwR9qK7fvB?usp=sharing>

DPR Constructions Jan 2018 to Mar 2019

Open-Book Project:

- DPR Construction is a construction manager specializing in technically complex and sustainable projects.

Product USP:

- When a contract is signed between the construction manager and the land owner, a 2000-page legal document is signed by both parties.
- Corporate lawyers who analyze these documents are extremely expensive in the United States.
- DPR construct wanted to build an internal AI tool that can understand the document and answer a few critical questions. Our product will be used by advocates within DPR.
- **Our goal was to reduce the time consumed by the advocates, by providing possible answers to a particular question from the legal document.**

Technology stack:

- We built a semantic search tool that can take a document and questions as input and provide relevant answers in the document.
- Semantic search was accomplished using [sentence-to-vector](#) (An improvised version of the word-to-vector). We used a pre-trained model on Wikipedia data with 700 Dimensions.

Product Pipeline:

- Pdf documents are converted to text documents using Abbyy and Pdftminer
- Converted text documents are pre-processed and each line from the document is converted into embeddings.
- Cosine similarity was performed between question embedding and answer embeddings. Finally, we sort the result.
- We display the top 10 possible answers to one question so that the advocates consume less time.

The Sample Codebase:

<https://www.adople.com/ai-health-record>

T-Mobiles: Dec 2016 to Nov 2018

T-mobile is a dutch telecom company. T-mobiles wanted a chatbot for CRM and I worked on Intent detection and Dutch Sentiment Analysis

Intent Detection:

We built a model that classifies the chat of every user into an intent, helping us to identify problems that customers go through along with rule-based dutch sentiment analysis.

Technology stack:

Keras, LSTM, GRU, Gensim word to vector, and Scikit Learn.

Social engineering awareness project:

During covid lot of companies saw a surge in cyber attacks in their organization. I implemented a **social engineering awareness tutorial** for a small-scale logistics client in Europe.

Technology stack:

I used a tool called Gophish, to send phishing **emails for awareness**, If a team member clicks any link in the phishing email, **they are redirected to the social engineering awareness tutorial**.

Other minor projects: Jun 2019 to May 2020

- Invoice classification system for Derrick Petroleum.
- AI trading tool for R&D.
- Published research paper named "**Infinite Health**" How AI can impact healthcare at JNU New Delhi.
- Built an End to End test suite using [DeepDiff](#) to compare JSON response between the QA environment and the Production environment.

Product Development at Adople AI Jun 2022 to Jan 2023

- Adople AI is a proud partner of Microsoft Azure Marketplace.
- We built 15 different products that can integrate with the Microsoft Azure Platform. Our product list is Document QA, sentiment analysis, Text

classification, Conversational AI model, Text to Image generation, and Live transcription.

Adople AI Product List:

https://drive.google.com/file/d/14wCY_dTg6QJKMkCzz57hXtQIzBG99NKr/view?usp=share_link

Technologies and Tools:

- Natural Language Processing
- Deep learning
- Machine learning
- Python
- R
- Matlab
- Tableau
- Transformers
- Keras
- TensorFlow
- Chatbot
- AWS
- MongoDB
- SQL
- PySpark

Education:

San José State University

B.S Software Engineering

Periyar University

B.S Computer Science