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The City College of New York's (CUNY) Undergraduate Funding Division for Grove School of
Engineering

4/2/2024

Funding for prototype of Uni-Translate, with the hopes of mass production to the public.

10 years

50 million dollars

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Abstract:

In a world where over 7,000 languages are spoken, the need for a universal translator is central to prevent misunderstandings, especially in engineering fields such as civil, mechanical, and computer engineering where even smallest miscommunications can lead to a catastrophe. Our Uni-Translator aims to become the primary source for language translation globally. Through rigorous quality assurance and feedback, we ensure the reliability and effectiveness of our translation tool across different languages. Our diverse teams, consisting of researchers, developers, data specialists, infrastructure experts, legal advisors, and quality assurance professionals, collaborates to address various aspects including research and development, data acquisition, infrastructure, talent acquisition, legal compliance, testing, localization, and patents. Ultimately, our goal is to see our software widely adopted across all fields worldwide, bridging the gap of communication on a global scale!

Introduction:

The world's first versatile language Translator, with numerous applications that are revolutionary. Who are we? Meet our team, Steven Serapio a computer engineering undergraduate, Mouctar Dia a Computer Science Undergraduate, Nelson Akintola a Mechanical Engineer Undergraduate, and Euler Vasquez a Civil Engineer Undergraduate. We are currently attending one of the best Engineering Schools in the Western Hemisphere, The City College of New York (Grover School of Engineering), Ranking #10 best engineering school in New York State. With our group completing multiple college level mathematics courses, coding, engineering, communication, and history courses and planning on continuing to take rigorous

engineering courses. We all come from different backgrounds; we understand this problem like no one else.

Problem Statement: In a world with over 8 billion people and 7,117 languages spoken there is bound to be a lack of communication. We wish to change that by bridging the gap of communication with our Uni-Translator. This problem resonates with all of group members due to English not being our first language. This problem which we have all faced at one point in our life, whether it be sending an email, translating important documents, or even trying to get a hold of a person that can properly and effectively translate. All these things take time and money which most people don't have. This is a problem overall but especially in our field where the slightest error/ miscommunication can cause the loss of lives of thousands. While we may not be the first to try tackle this problem, we will be the best.

Objective: Our goal here is to create a Covenant, Accessible, Affordable, Profitable, and innovative product. With our product having the capability of automatically translating any known language to another. Either by typing or by speaking, the application can detect any language and translate it to any other language. That can either be highly spoken languages like from English and Spanish or more "unknown" languages like Quechua or Dhivehi. With this application you can download different languages to be stored in your device that can be used even if there is no available network, users have to manually download the languages they want it is this way to not use more than the necessary storage in the user's device. In essence we are cutting out the middleman, aiding with the process of learning and development any language within our database and having the abilities to have a deep understanding of both grammar and cultures.

Methodology:

1. Research and Development, neural networks to enhance translation accuracy.
2. Data Acquisition and Annotation play an important role as we accumulate vast language datasets and train our system to understand and translate with precision.
3. Infrastructure and Computing Resources are pivotal, ensuring we have the computational strength vital for intensive tasks.
4. Talent and Human Resources are carefully allotted to make certain understanding in areas like linguistics, device getting to know, and software program engineering.
5. Legal and Licensing aspects are addressed to secure necessary permissions, patents and ensure compliance.
6. Testing and Quality Assurance techniques are meticulously carried out to guarantee the reliability and effectiveness of our translation device throughout numerous languages and contexts.
7. Localization and Language Support are prioritized to cater to diverse consumer desires worldwide. As we progress, we remain aware of feedback and continuously enhance our product. Through this complete approach, we intention to deliver a translation tool that not only meets high standards of accuracy but also upholds inclusivity and accessibility for all customers.

Evaluation: Our evaluation will be done by a diverse team consisting of members of different departments within the company product development, marketing, customer support, and finance. Additionally, external experts in linguistics, language education, and technology may be consulted to provide insights. This will be done within to evaluate how well the Uni-Translator

works in a day-to-day setting. Surveys and user feedback, Usage analytics, Comparative analysis, financial analysis, Expert reviews. These are the methods we will use to get feedback.

Long-term Project Plans: Following the launch of our product, our long-term project plans entail ongoing maintenance and regular updates to ensure effectiveness and seamlessness of the system performance. We will conduct maintenance tasks on a monthly or quarterly basis, addressing any issues that arise and implementing improvements as needed. Additionally, we will expand language support by incorporating additional languages and introducing new features. Our ultimate objective is to push the product as the primary translator for all electronic systems, offering a reliable translation solution for users worldwide.

Appendices: Research Laboratory, User Testing Facilities, Backup and Disaster Recovery Systems, Speech Recognition and Synthesis Systems, High-Performance Computing, Language Resources Repository, Software Development Environment, Collaboration Spaces

Budget Explanation: During the duration of 10 years, we will be using 50 million dollars for the following: Research and Development, Data Acquisition and Annotation, Infrastructure and Computing Resources, Talent, and Human Resources, Legal and Licensing, Testing and Quality Assurance, Localization and Language Support, and Patents.

8% will go to legal and licensing (\$400,000)

2% Talent and Human Resources (\$100,000)

20% Data Acquisition (\$1,000,000)

20% Infrastructure and computing resources (\$1,000,000)

25% Research and Development (\$1,250,000)

10% Test and quality (\$500,000)

15% Localization and Language support (\$750,000)