

## Locovo LLC

Stenopoly - automated polylingual stenographer

### Lead Inventor

Calvin Shum, CEO

### Unmet Need

#### Academia

- *College and University Offices of Disability Services.* In order for the entire institution to comply with the Americans with Disabilities Act, these departments require accessibility technology for the deaf and hard-of-hearing students with auditory and other learning disabilities.
- *Language Schools.* These institutes require greater efficacy and efficiencies in student satisfaction and performance for rapid language learning and linguistic literacy.
- *Language Tourism.* These schools require localization to acclimate, adapt, and accelerate students' overall experience abroad.

#### Tourism and Hospitality, Meetings, Initiatives, Conferences Exhibitions Industry

- *Hotels.* These hosts need to differentiate accommodations and amenities.
- *Convention Centers.* These facilities must provide accessibility and broaden attendance rate with localization.

#### Multinational Corporations

- *Global Departments.* These groups require efficient cross-cultural collaborations across language barriers and time zones.
- *Corporate Learning.* These functions must comply with ADA, enforced by the EEOC, to accelerate internal growth and workforce capabilities thus maximizing investments and benefits.

### Opportunity

Stenopoly offers accessibility, localization, and full cycle production efficiencies. The application provides 1) real-time bilingual subtitling for visual stimulus as an optical tool for the disabled; 2) language acquisition as a language learning tool; 3) language adaptation to bridge global corporate communication; 3) presentation tool to increase and broaden attendance rates with greater understanding; and serves as 4) a multimedia broadcasting tool adding multilingual subtitling and transcription.

### Unique Attributes

Stenopoly automates real-time subtitling in multiple languages for each orator, speaking engagement, and acoustic environment. The closed loop SaaS enhances live experiences and streamlines production. Stenopoly generates live bilingual subtitling, transcripts, video captions and subtitles, abstracts, and analyses.

## Stage of Development

- ✓ Prototype made
- ✓ Demo available

## Use Cases and Clinical Applications

- Schools want to caption online content, optimize learning for all, acclimate international students, adapt classrooms for students with disabilities utilizing this ed tech.
- Multinational corporations will use Stenopoly to integrate international functions, departments, and offices.
- Conference hosts want to utilize this communication tech to grow attendance rates and repeat attendees across languages and locations.

## Intellectual Property

Pending utility patents for key algorithms, machine learning, and deep learning.

## References

- Martin, H.; Robinson, J.P.; Duerstock, B.S., "Using Speech Recognition for Real-Time Captioning and Lecture Transcription in the Classroom," Learning Technologies, IEEE Transactions on, vol.6, no.4, pp.299,311, Oct.-Dec. 2013 doi: 10.1109/TLT.2013.21. <http://ieeexplore.ieee.org/document/6529071/> Ranchal, R.; Taber-Doughty, T.; Yiren Guo; Bain, K.;
- Jiang, D. N.; Pan, Y. X.; Liu, W.; Qin, Y.; Picheny, M.; Luther, P. "Real-time speech transcription service to improve non-native speakers' listening comprehension," in The 25th Annual International Technology & Persons with Disabilities Conference, Mar. 2009. <https://www.03.ibm.com/able/events/downloads/RealtimeTranscriptionService+presentation+3-26-2009.pdf>. <https://www-3.ibm.com/able/events/downloads/RealtimeTranscriptionService+document+3-26-2009.pdf>
- Jäncke, L. (2014). The brain of synesthetes. Rendiconti Lincei, 25(3), 309-316. Chicago. <https://link.springer.com/article/10.1007/s12210-014-0323-z>
- Glass, J. R., Hazen, T. J., Cyphers, D. S., Schutte, K., & Park, A. (2005, October). The MIT spoken lecture processing project. In Proceedings of HLT/EMNLP on Interactive Demonstrations. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.95.2917&rep=rep1&type=pdf>

For further information on this company:

### Company Contact

Calvin Shum  
+1 717.405.1937  
[calvin@locovo.co](mailto:calvin@locovo.co)

### RAMP / Saul Ewing Contact

Michelle Ferguson  
+1 610.251.5059  
[mferguson@saul.com](mailto:mferguson@saul.com)

### L2C Partners Contact

Merle Gilmore  
+1 610.662.0940  
[gilmore@l2cpartners.com](mailto:gilmore@l2cpartners.com)

RAMP is an initiative of Saul Ewing LLP designed to provide entrepreneurs the support and practical direction needed to grow and sustain a business in addition to basic legal needs.