

# Kayo YIN

## PERSONAL DATA

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## EDUCATION

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SEP. 2020 -CURRENT	Master in LANGUAGE TECHNOLOGIES <b>Carnegie Mellon University</b> , Pittsburgh, PA QPA: 4.13 (Fall 2020 - Summer 2021) Advisor: Prof. Graham Neubig Graduate Student Representative, Social Chair for CMQ+
SEP. 2017 -JUN. 2020	Bachelor of Science in MATHEMATICS and COMPUTER SCIENCE <b>École Polytechnique</b> , Paris, France GPA: 4.15/4.0+, Summa Cum Laude Thesis: Sign Language Translation with Transformers (A+) Flutist at OPS, Saxophonist at Fanfare, Soprano at Ensemble Vocal, Midfielder for Women's Soccer Team  Study Abroad <b>National Chiao Tung University</b> , Hsinchu, Taiwan GPA: 4.30/4.0+ Erhuist and Pianist at Chinese Orchestra, Harmonicist at Harmonica Band, Performer at Martial Arts Club
SEP. 2014 -JUN. 2017	High School Diploma, Baccalauréat Général Option Internationale Américaine (OIB) <b>École Jeannine Manuel</b> , Paris, France Grade: 18.25/20, Mention Très Bien Série Scientifique, Spécialité Mathématiques ( <i>Scientific Track, Mathematics Specialty</i> ) Flutist at Chamber Orchestra, Saxophonist at Jazz Band, Singer at Chorale and Acapella
SEP. 2013 -JUN. 2016	Certificat d'Études Musicales in SOLFÈGE (Baccalauréat-level diploma of music) <b>Conservatoire Frédéric Chopin</b> , Paris, France Mention Très Bien Major: Flute & Solfège, Minor: Opera, Classical Ballet, Tap Dance

## WORK EXPERIENCE

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JUN. 2020 - SEP. 2020	Research Intern at LA JAVANESS, Paris <i>Natural Language Processing</i> Developed a multi-label email classifier with meta-pseudo labeling.
JAN. 2020 - APR. 2020	Thesis Research Intern at LABORATOIRE INFORMATIQUE DE L'X, Paris <i>Natural Language Processing</i> Part of the Data Science and Mining (DaSciM) team, advised by Prof. Jesse Read. Researched Sign Language Translation with Transformers.
SEP. 2019 - JAN. 2020	Research Scientist at ILLUIN TECHNOLOGY, Paris <i>Question Answering</i> Research unsupervised question answering (QA) in French. Perform data augmentation of French QA data based on heuristics and unsupervised NMT. Develop and train CamemBERT and XLNet for QA.
JUN. 2019 - AUG. 2019	Research Intern at ILLUIN TECHNOLOGY, Paris <i>Artificial Intelligence</i> Denoising scanned documents for OCR, ensemble model with CNN and XGB meta-learners. Research state-of-the-art deep learning methods for medical imagery analysis. Unsupervised question answering based on Cloze generation and unsupervised NMT.

## PUBLICATIONS

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\* = equal contribution

Refereed Papers	<b>SIGNED COREFERENCE RESOLUTION</b> <b>K. Yin</b> , K. DeHaan, M. Alikhani. <i>2021 Conference on Empirical Methods in Natural Language Processing (EMNLP)</i> . November 2021.
	<b>WHEN IS WALL A PARED AND WHEN A MURO?: EXTRACTING RULES GOVERNING LEXICAL SELECTION</b> A. Chaudhary, <b>K. Yin</b> , A. Anastasopoulos, G. Neubig. <i>2021 Conference on Empirical Methods in Natural Language Processing (EMNLP)</i> . November 2021.
	<b>DATA AUGMENTATION FOR SIGN LANGUAGE GLOSS TRANSLATION</b> A. Moryossef*, <b>K. Yin*</b> , G. Neubig, Y. Goldberg <i>18th Biennial Machine Translation Summit (MTSummit) 1st International Workshop on Automatic Translation for Signed and Spoken Languages (AT4SSL)</i> . August 2021.
	<b>*Best Theme Paper* INCLUDING SIGNED LANGUAGES IN NATURAL LANGUAGE PROCESSING</b> <b>K. Yin</b> , A. Moryossef, J. Hochgesang, Y. Goldberg, M. Alikhani. <i>59th Annual Meeting of the Association for Computational Linguistics (ACL)</i> . August 2021.
	<b>DO CONTEXT-AWARE TRANSLATION MODELS PAY THE RIGHT ATTENTION?</b> <b>K. Yin</b> , P. Fernandes, D. Pruthi, A. Chaudhary, A. Martins, G. Neubig <i>59th Annual Meeting of the Association for Computational Linguistics (ACL)</i> . August 2021.
	<b>MEASURING AND INCREASING CONTEXT USAGE IN CONTEXT-AWARE MACHINE TRANSLATION</b> P. Fernandes, <b>K. Yin</b> , G. Neubig, A. Martins <i>59th Annual Meeting of the Association for Computational Linguistics (ACL)</i> . August 2021.
	<b>BETTER SIGN LANGUAGE TRANSLATION WITH STMC-TRANSFORMER</b> <b>K. Yin</b> , J. Read. <i>28th International Conference on Computational Linguistics (COLING)</i> . December 2020.
Preprints	<b>ATTENTION IS ALL YOU SIGN: SIGN LANGUAGE TRANSLATION WITH TRANSFORMERS</b> <b>K. Yin</b> , J. Read. <i>European Conference on Computer Vision (ECCV) Workshop on Sign Language Recognition, Translation and Production (SLRTP)</i> . August 2020.
	<b>WHEN DOES TRANSLATION REQUIRE CONTEXT? A DATA-DRIVEN, MULTILINGUAL EXPLORATION</b> <b>K. Yin*</b> , P. Fernandes*, A. Martins, G. Neubig

## AWARDS & HONORS

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AUG. 2021	Siebel Scholar Class of 2022.
AUG. 2020	CMU Research Fellowship for the academic year 2021/2022.
AUG. 2021	Best Theme Paper at Association for Computational Linguistics (ACL).
SEP. 2020	Global Winner in Computer Science at the Global Undergraduate Awards.
AUG. 2020	CMU Research Fellowship for the academic year 2020/2021.
JUN. 2015	Jeannine Manuel Award for outstanding performance on the academic year 2014/2015.
APR. 2015	Finalist Concours Kangourou des Mathématiques (6th place out of 13011).
JUN. 2014	Jeannine Manuel Award for outstanding performance on the academic year 2013/2014.
MAY. 2014	EJM Debate Club Best Speaker Award for the academic year 2013/2014.
APR. 2012	Finalist Concours Kangourou des Mathématiques (8th place out of 53937).

## INVITED TALKS

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- NOV. 2021 [Natural Language Processing for Signed Languages](#), *DeepMind*  
OCT. 2021 [Extending Neural Machine Translation to Dialogue and Signed Languages](#), *University of Pittsburgh*  
SEP. 2021 [Understanding, Improving and Evaluating Context Usage in Context-aware Translation](#), *SIGTYP*  
MAR. 2021 [Do Context-Aware Translation Models Pay the Right Attention?](#), *Unbabel*  
NOV. 2020 [Sign Language Translation with Transformers](#), *The Global Undergraduate Summit*  
OCT. 2020 [Sign Language Translation with Transformers](#), *Computer Vision Talks*

## PRESS & INTERVIEWS

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- SEP. 2021 [Five SCS Students Named Siebel Scholars](#), *CMU SCS*  
AUG. 2021 [LTI Master's Student Urges NLP Focus on Signed Languages](#), *CMU SCS*  
AUG. 2021 [LTI Student Wins Best Theme Paper at ACL-IJCNLP 2021](#), *CMU LTI*  
OCT. 2020 [Bachelor of Science Alumni - Kayo at Carnegie Mellon University](#), *École Polytechnique*  
SEP. 2020 [Kayo Yin wins the 2020 Global Undergraduate Awards](#), *École Polytechnique*  
MAY. 2020 [Testimony: Kayo Yin, BX2020 Maths/Computer Science Student](#), *École Polytechnique*  
DEC. 2019 [Meet Kayo Yin, Bachelor Student](#), *Women in Science*  
FEB. 2019 [Meet our students - Kayo Yin](#), *École Polytechnique*  
JUN. 2018 [Kayo Yin, One-Woman Band](#), *A Lifetime of Science*

## ACADEMIC SERVICE

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- *International Workshop on Automatic Translation for Signed and Spoken Languages*, Program Committee 2021
- *TransportiX Hackathon*, Mentor 2021
- *French Tournament of Young Mathematicians (TFJM<sup>2</sup>)*, Jury 2020

## CIVIC ENGAGEMENT

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- 2020-2022 **Graduate Student Representative**, *Carnegie Mellon University Graduate Student Assembly*  
2020-2022 **Equity, Diversity and Inclusion Committee**, *Carnegie Mellon University Graduate Student Assembly*  
2020-2021 **Social Chair**, *CMQ+ (CMU Graduate LGBTQ+ Association)*  
2018-2020 **Outreach Officer**, *L'Action Sociale de la Kès (Polytechnique Humanitarian Association)*  
2018-2019 **Organizer**, *Polytechnique Mental Health Awareness Week*  
2017-2020 **Communications Officer**, *Développement Durable à l'X (Polytechnique Sustainable Development Society)*  
2017-2020 **Board Member**, *XY (Polytechnique LGBTQ+ Association)*  
2017-2020 **Member**, *X au Féminin (Polytechnique Women's Society)*

## SKILLS AND INTERESTS

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LANGUAGES: Japanese (Native); French (Native); English (Fluent); Mandarin (Conversant); Spanish (Basic)  
TECHNICAL SKILLS: Python (pytorch, tensorflow, scikit, numpy) , C++, C, Coq  
RESEARCH INTERESTS: Machine Learning, Natural Language Processing

*Last updated November 5, 2021*