# Langlin Huang

Email: h.langlin@wustl.edu | LinkedIn: langlin-huang | Tel: 206-643-8598 | GitHub: shrango.github.io

#### EDUCATION

•Washington University in St. Louis (WashU)

St.Louis, U.S.

Ph.D. Student in Computer Science

Aug. 2024 - Jun. 2029 (expected)

•Institute of Computing Technology, Chinese Academy of Sciences (ICT/CAS)

Beijing, China

M.E. in Computer Technology -GPA: 3.75/4.0, Outstanding Dissertation

Sep. 2021 - Jun. 2024

•University of International Business and Economics (UIBE)

Beijing, China

B.E. in Data Science and Big Data Technology -GPA: 3.74/4.0 (Rank:2/147)

Sep. 2017 - Jun. 2021

#### Research Interests

- Language Model Reasoning & Efficient Model Generation
- Machine Translation & Multilingual Representation Learning

#### **PUBLICATIONS**

#### • PosS: Position Specialist Generates Better Draft for Speculative Decoding

Langlin Huang, Chengsong Huang, Jixuan Leng, Di Huang, Jiaxin Huang Submitted to ICLR 2026 [Paper] [Code]

## •MoCE: Adaptive Mixture of Contextualization Experts for Byte-based Neural Machine Translation

Langlin Huang, Mengyu Bu, Yang Feng

NAACL 2025 oral [Paper] [Code]

#### •Integrating Multi-scale Contextualized Information for Byte-based Neural Machine Translation

Langlin Huang, Yang Feng

ACL findings, 2024 [Paper][Code]

#### •Enhancing Neural Machine Translation with Semantic Units

Langlin Huang, Shuhao Gu, Zhuocheng Zhang, Yang Feng

EMNLP findings, 2023 [Paper][Code]

#### •CrossWordBench: Evaluating the Reasoning Capabilities of LLMs and LVLMs with Controllable Puzzle Generation

Jixuan Leng, Chengsong Huang, **Langlin Huang**, Bill Yuchen Lin, William W Cohen, Haohan Wang, Jiaxin Huang COLM 2025 [Paper][Code] [Dataset]

#### •Divide, Reweight, and Conquer: A Logit Arithmetic Approach for In-Context Learning

Chengsong Huang,  ${\bf Langlin~Huang},~{\bf Jiaxin~Huang}$ 

ICLR 2025 workshop [Paper][Code]

## • Efficient test-time scaling via self-calibration

Chengsong Huang, Langlin Huang, Jixuan Leng, Jiacheng Liu, Jiaxin Huang

Preprint [Paper][Code]

# •BayLing: Bridging Cross-lingual Alignment and Instruction Following through Interactive Translation for Large Language Models

Shaolei Zhang, Qingkai Fang, Zhuocheng Zhang, Zhengrui Ma, Yan Zhou, Langlin Huang, Mengyu Bu,

Shangtong Gui, Yunji Chen, Xilin Chen, Yang Feng

Preprint [Paper] [Code]

### •Automatic Construction of a Depression-Domain Lexicon Based on Microblogs: Text Mining Study

Genghao Li, Bing Li,  ${\bf Langlin\ Huang},$  Sibing Hou

JMIR medical informatics, 2020, Vol 8. Jun. 2020 [Paper]

#### **PROJECTS**

## $\bullet \textbf{CVAE-based Label Smoothing for Neural Machine Translation} \\$

Feb. 2022 - Aug. 2022

Proposed a flexible label smoothing for training language models and translation models.

 Contributions: Proposed to replace uniform distributions with predicted real label distributions in label-smoothed cross-entropy loss.

Proposed to predict real label distribution with a Conditional Variational Auto Encoder(CVAE) module by fore-seeing the ground truth word.

- Achievement: Significantly improved translation performance by 1.2 BLEU on En-Ro and Zh-En translation tasks.
- Patent Link: http://epub.cnipa.gov.cn/patent/CN115455993A

#### •Chinese-Thai Translation System

May. 2022 - Jul. 2022

 $\label{lem:cond} \mbox{Developed strong Chinese-Thai bidirectional machine translation systems.}$ 

- Contributions: Proposed a strategy to modify pre-trained language model mBART, without hurting performance. Crawled external in-domain texts and augmented training data via back-translation.
- Achievement: Won the Championship in the 18th China Conference on Machine Translation(CCMT) Zh-Th track.
- Technical Report link: http://sc.cipsc.org.cn/mt/conference/2022/papers/test\_paper/60/60 Paper.pdf

# LANGUAGES PROFICIENCY

Master:Python, Shell, LaTeX, C++

Proficient: JAVA, R, C

# COMMUNITY SERVICES

• Top-reviewer: NeurIPS 2025

- Reviewer: Neur<br/>IPS, ICLR, COLM, ACL, ACL Rolling Review, TALLIP