

TU VU

tuv@vt.edu

<https://tuvllms.github.io>

APPOINTMENTS

Virginia Tech

Assistant Professor, Computer Science

Research Interests: *large language models & transfer learning*

August 2024 —

Google Research

Research Scientist

August 2023 — *present*

EDUCATION

University of Massachusetts, Amherst

M.S/PH.D. in Computer Science

Advisor: [Mohit Iyyer](#)

Thesis committee: [Mohit Iyyer](#), [Subhransu Maji](#), [Hamed Zamani](#), [Thang Luong](#), [Colin Raffel](#)

2016 — 2023

2018 — 2023

Vietnam National University, Hanoi

B.S. Honors Program in Computer Science

Highest distinction (class rank: 1/100)

2009 — 2013

PROFESSIONAL EXPERIENCE

Google Deepmind

Student Researcher *with* [Thang Luong](#) & [Quoc Le](#)

Fall 2022 — Spring 2023

Google Deepmind

Research Intern *with* [Thibault Sellam](#) & [Elizabeth Clark](#)

Summer 2022

Google Deepmind

Student Researcher *with* [Noah Constant](#)

Winter 2021 — Spring 2022

Google Research

Research Intern & Student Researcher *with* [Daniel Cer](#) & [Noah Constant](#)

Summer 2021 — Fall 2021

Google Deepmind

Student Researcher *with* [Thang Luong](#) & [Quoc Le](#)

Winter 2020 — Spring 2021

Google Research

Research Intern *with* [Grady Simon](#) & [Zi Yang](#) & [Nan Hua](#)

Summer 2020

Microsoft Research

Research Intern *with* [Tong Wang](#) & [Tsendsuren Munkhdalai](#) & [Adam Trischler](#)

Summer 2019

SELECTED PREPRINTS & PUBLICATIONS

For an up-to-date list of my research papers, please see my [Google Scholar](#) profile or my [Semantic Scholar](#) profile.

[FreshLLMs: Refreshing Large Language Models with Search Engine Augmentation](#)

Tu Vu, Mohit Iyyer, Xuezhi Wang, Noah Constant, Jerry Wei, Jason Wei, Chris Tar, Yun-Hsuan Sung, Denny Zhou, Quoc Le, and Thang Luong
arXiv preprint 2023

[The Flan Collection: Designing Data and Methods for Effective Instruction Tuning](#)

Shayne Longpre, Le Hou, **Tu Vu**, Albert Webson, Hyung Won Chung, Yi Tay, Denny Zhou, Quoc V Le, Barret Zoph, Jason Wei, and Adam Roberts
ICML 2023

[Mixture-of-experts meets instruction tuning: A winning combination for large language models](#)

Sheng Shen, Le Hou, Yanqi Zhou, Nan Du, Shayne Longpre, Jason Wei, Hyung Won Chung, Barret Zoph, William Fedus, Xinyun Chen, **Tu Vu**, Yuexin Wu, Wuyang Chen, Albert Webson, Yunxuan Li, Vincent Zhao, Hongkun Yu, Kurt Keutzer, Trevor Darrell, and Denny Zhou
ICLR 2024

[SPoT: Better Frozen Model Adaptation through Soft Prompt Transfer](#)

Tu Vu, Brian Lester, Noah Constant, Rami Al-Rfou, and Daniel Cer
ACL 2022

[Overcoming Catastrophic Forgetting in Zero-Shot Cross-Lingual Generation](#)

Tu Vu, Aditya Barua, Brian Lester, Daniel Cer, Mohit Iyyer, and Noah Constant
EMNLP 2022

[STraTA: Self-Training with Task Augmentation for Better Few-shot Learning](#)

Tu Vu, Minh-Thang Luong, Quoc Le, Grady Simon, and Mohit Iyyer
EMNLP 2021

[Exploring and Predicting Transferability across NLP Tasks](#)

Tu Vu, Tong Wang, Tsendsuren Munkhdalai, Alessandro Sordoni, Adam Trischler, Andrew Mattarella-Micke, Subhransu Maji, and Mohit Iyyer
EMNLP 2020

RECENT INVITED TALKS

[Efficient Adaptation of Large Language Models](#)

Graph Neural Networks Reading Group, **Google**

November 2023

[Effective and Efficient Transfer Learning
in the Era of Large Language Models](#)

Faculty job talk

Spring 2023

[Overcoming Catastrophic Forgetting
in Zero-Shot Cross-Lingual Generation](#)

Parameter Efficient Tuning Methods Sync, **Google**

October 2022

[Transfer Learning with Large-scale Language Models](#)

Lecture at **VietAI**

August 2022

The Appeal of Parameter-efficient Transfer Learning
Natural Language Accelerated Team, **Google**

June 2022

SPoT: Better Frozen Model Adaptation through Soft Prompt Transfer
Parameter Efficient Tuning Methods Sync, **Google**

December 2021

ACADEMIC SERVICE

Program Committee/Reviewer for various conferences and workshops in machine learning and natural language processing, including NEURIPS, ARR, ACL, EMNLP, NAACL, COLING, CoNLL, INLG.

SELECTED MEDIA

FRESHLLMs: [ZDNET](#) 2023
THE FLAN COLLECTION: [Google Research Blog](#) 2023
SPoT: [Headlines of Google AI's Natural Language Accelerated Newsletter](#) Q1, 2022

SELECTED AWARDS & HONORS & FUNDING

Google Student Researchships 2020 — 2023
UMass Amherst Graduate Assistantships 2016 — 2023
Honda Y-E-S Award for young engineers and scientists, Vietnam (in the top 10 nationally) 2013
Outstanding Academic and Co-curricular Achievements, Vietnam National University 2013
Prominent Young Figure Award, Vietnam National University 2010 & 2012
First Runner-up Prize, International Programming Contest, Japan (2nd among 64 teams internationally) 2011
Outstanding Young Talent of the Capital City, Vietnam (in the top 100 most outstanding young talents selected from a wide range of fields) 2010
Champion Prize, National Mathematical Olympiad, Vietnam (1st among more than 600 contestants nationally) 2010
A number of prizes in National/International Olympiads (in both Mathematics and Informatics) 2009 — 2013
A number of academic scholarships for undergraduate students 2009 — 2013

PATENTS

*: original inventor

[Frozen Model Adaptation through Soft Prompt Transfer](#)
Tu Vu, Brian Lester, Noah Constant, Rami Al-Rfou, Daniel Cer
U.S. Patent Application, 17/863,840

[Task Augmentation and Self-training for Improved Few-shot Learning](#)
Thang Luong, **Tu Vu***, Quoc Le, Grady Simon
U.S. Patent Application, 17/826,690