

GEORGE STOICA

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🔗 [Github](#) | 🔖 [LinkedIn](#) | 🔘 [Google Scholar](#)

RESEARCH INTERESTS

I am interested in understanding how models synthesize information. My recent work centers around multitask model-merging, and efficiently adapting existing models to solve new problems *without finetuning*. I am currently exploring model merging and mechanistic interpretability in foundation models. My past experience lies in architecture development, relation extraction and knowledge graphs.

Major Interests: Representation Understanding; Multitask Learning; Model Merging; Efficient Learning; Parameter Efficiency; Mixture of Experts

Experience Areas: LLMs; Computer Vision, Natural Language Processing, Efficiency

Frameworks: Pytorch; Tensorflow; Numpy; Scikit-Learn; Github

EDUCATION

Georgia Institute of Technology

Aug 2021 - May 2026 (Expected)

Doctor of Philosophy in Machine Learning

Advised by Professor Judy Hoffman | GPA: 3.92

Carnegie Mellon University

Aug 2015 - May 2019

Bachelor of Science in Statistics and Machine Learning

QPA: 3.68 (Final 2 Years: 3.93)

University Honors | School of Computer Science College Honors | Dean's List with High Honors | Dean's List

CONFERENCE PUBLICATIONS & PREPRINTS

[Model Merging with SVD to Tie the Knots](#)

arXiv 2024 (Under Review)

George Stoica*, Pratik Ramesh*, Boglarka Ecsedi, Leshem Choshen, Judy Hoffman

[ZipIt! Merging Models from Different Tasks without Training](#)

ICLR 2024

George Stoica*, Daniel Bolya*, Jakob Bjorner, Pratik Ramesh, Taylor Hearn, Judy Hoffman

[Re-TACRED: Addressing Shortcomings of the TACRED Dataset](#)

AAAI 2021

George Stoica, Emmanouil Antonios Platanios, Barnabás Póczos

[Improving Relation Extraction by Leveraging Knowledge Graph Link Prediction](#)

arXiv 2020

George Stoica, Emmanouil Antonios Platanios, Barnabás Póczos

[Contextual Parameter Generation for Knowledge Graph Link Prediction](#)

AAAI 2020

George Stoica*, Otilia Stretcu*, Emmanouil Antonios Platanios*, Tom Mitchell, Barnabás Póczos

WORKSHOP PAPERS

[ZipIt!: Multitask Model Merging without Training](#)

(Oral) UniReps NeurIPS 2023

George Stoica*, Daniel Bolya*, Jakob Bjorner, Pratik Ramesh, Taylor Hearn, Judy Hoffman

[Bi-Directional Self-Attention for Vision Transformers](#)

(Best Paper Award) VTTA NeurIPS 2022

George Stoica, Taylor Hearn, Bhavika Devnani, Judy Hoffman

[Re-TACRED: A New Relation Extraction Dataset](#)

KR2ML NeurIPS 2020

George Stoica, Emmanouil Antonios Platanios, Barnabás Póczos

[Knowledge Graph Enhanced Relation Extraction](#)

KR2ML NeurIPS 2020

George Stoica, Emmanouil Antonios Platanios, Barnabás Póczos

[Contextual Parameter Generation for Knowledge Graph Link Prediction](#)

GRL NeurIPS 2019

George Stoica*, Otilia Stretcu*, Emmanouil Antonios Platanios*, Tom Mitchell, Barnabás Póczos

INVITED TALKS

Big Bang Reading Group, Google Research

2024

[On Model Merging](#)

Bio-NLP Lab Seminar, University of Massachusetts Amherst

2022

[Improving Relation Extraction by Leveraging Knowledge Graph Link Prediction Objectives](#)

FELLOWSHIPS

National Science Foundation

Aug 2023 - Present

Graduate Research Fellowship

ACADEMIC APPOINTMENTS

Visiting PhD Student, University of Washington, Seattle, WA

Sept 2024 - Present

Visiting PhD Student at the University of Washington and merging foundation vision models. Working with Ranjay Krishna and Judy Hoffman.

NSF Graduate Research Fellow, Georgia Institute of Technology, Atlanta, GA

Aug 2023 - Present

Building capable multitask models by fusing the weights of existing task-experts. Advised by Professor Judy Hoffman.

Graduate Research Assistant, Georgia Institute of Technology, Atlanta, GA

Aug 2021 - Aug 2023

Introduced Ziptl!, developed inverse self-attention, explored compositional few-shot learning. Advised by Professor Judy Hoffman.

Research Assistant, CMU Machine Learning Department, Pittsburgh, PA

Aug 2019 - Jan 2021

Created a new standard relation extraction benchmark. Introduced framework to improve relation extraction models by coupling knowledge from link prediction. Built models capable of explaining anomalies in video. Advised by Professor Barnabás Póczos.

INDUSTRY APPOINTMENTS

Student Researcher, Google DeepMind, Mountain View, CA

April 2024 - Aug 2024

Developed a conversational agent with Gemini for solving nuanced client-problems. Improved existing multimodal in-context learning approaches. Product focused.

Machine Learning Researcher, Inokyo, San Francisco, CA

May 2019 - Aug 2019

Developed and demonstrated Inokyo's first end-to-end solution for autonomous checkout in stores.

Data Science Intern, Palo Alto Networks (PAN), Santa Clara, CA

May 2018 - Aug 2018

Improved PAN's ability to predict sales representative churn, using several classification and statistical methodologies on heavily skewed data.

<i>Engineering Intern, Conviva, Foster City, CA</i> Designed several production metrics to improve customer insights across products. Worked with 10s billions of data examples.	May 2017 - Jul 2017
<i>Data Science Intern, Upwork, Mountain View, CA</i> Designed a freelancer hire prediction model with active learning.	May 2016 - Jul 2016

CONFERENCE REVIEWERSHIPS

ICLR 2025, CVPR 2024; NIVT-ICCV 2023; ACL-IJCNLP 2021

TEACHING EXPERIENCE

<i>Graduate Teaching Assistant, Introduction to Computer Vision, Atlanta, GA</i> Prepared homework and exam problems. Undergraduate course with ~180 students.	Jan 2023 - May 2023
<i>Teaching Assistant, Introduction to Machine Learning (PhD), Pittsburgh, PA</i> Prepared materials and assisted teaching. PhD-level course with ~200 students.	Jan 2018 - May 2018

ACTIVITIES

<i>President & Co-Founder, CMU Data Science Club, Pittsburgh, PA</i> Organized corporate talks, workshops and datathons for over 200 club members. Represented club and presided over all club meetings and university functions.	Nov 2016 - Nov 2017
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FOREIGN LANGUAGES

Romanian (fluent) | French (beginner)