

Let's Work Together on the Future of Al

Reinforcement Learning Natural Language Processing Computer Vision Deep Learning



About Salesforce Research

Salesforce Research advances AI techniques that pave the path for new AI research directions, innovative products and applications with a positive impact on society. Our team of researchers, engineers, product managers, and designers drive AI innovation across pure research, applied research, and new product incubation- all built on our powerful AI platform. We bring companies and customers together using AI that is explainable, transparent, and accountable.

As part of our team you'll learn unique skills, work with talented people, influence the industry standard for fair and ethical use of artificial intelligence and help us to shape the future of AI.



Palo Alto and Salesforce Research Asia in Singapore!

Learn more at einstein.ai



Our Focus Areas

- Natural Language Processing
- Deep Learning Fundamentals
- Computer Vision
- · Reinforcement Learning
- Recommendation Systems
- Big Data

- Conversational AI
- Speech Recognition & Text-to-Speech
- Ethics in AI
- Explainable AI

Areas of Application

- AI for Good
- AI for Medicine



Our Work

EMNLP Accepted Long Papers

- 1. Universal Natural Language
 Processing with Limited
 Annotations: Try Few-shot Textual
 Entailment as a Start
 Wenpeng Yin, Nazneen Fatema
 Rajani, Dragomir Radev, Richard
 Socher and Caiming Xiong
- 2. TOD-BERT: Pre-trained Natural Language Understanding for Task-Oriented Dialogue Chien-Sheng Wu, Steven C.H. Hoi, Richard Socher and Caiming Xiong
- 3. Evaluating the Factual Consistency of Abstractive Text Summarization Wojciech Kryscinski, Bryan McCann, Caiming Xiong, Richard Socher
- 4. Probing Task-Oriented Dialogue Representation from Language Models Chien-Sheng Wu and Caiming Xiong
- 5. Mind Your Inflections! Improving NLP for Non-Standard Englishes with Base-Inflection Encoding Samson Tan, Shafiq Joty, Lav R. Varshney, and Min-Yen Kan.R
- Response Selection for Multi-Party Conversations with Dynamic Topic Tracking Weishi Wang, Shafiq Joty, and

Steven C.H. Hoi

- 7. VD-BERT: A Unified Vision and Dialog Transformer with BERT Yue Wang, Shafiq Joty, Michael R., Irwin King, Caiming Xiong, and Steven C.H. Hoi
- 8. Discern: Discourse-Aware
 Entailment Reasoning Network for
 Conversational Machine Reading
 Yifan Gao, Chien-Sheng Wu, Jingjing
 Li, Shafiq Joty, Steven C.H. Hoi,
 Caiming Xiong, Irwin King, and
 Michael Lyu
- 9. BiST: Bi-directional Spatio-Temporal Reasoning for Video-Grounded Dialogues Hung Le, Doyen Sahoo, Nancy Chen and Steven C.H. Hoi
- 10. UniConv: A Unified Conversational Neural Architecture for Multidomain Task-oriented Dialogues Hung Le, Doyen Sahoo, Chenghao Liu, Nancy Chen and Steven C.H. Hoi
- 11. Discriminative Nearest Neighbor Few-Shot Intent Detection by Transferring Natural Language Inference

Jianguo Zhang, Kazuma Hashimoto, Wenhao Liu, Chien-Sheng Wu, Yao Wan, Philip Yu, Richard Socher and Caiming Xiong

Our Work

EMNLP Accepted Short Papers

12. The Thieves on Sesame Street are Polyglots: Extracting Multilingual Models from Monolingual APIs

Nitish Shirish Keskar, Bryan McCann, Caiming Xiong and Richard Socher

13. Simple Data Augmentation with the Mask Token Improves Domain Adaptation for Dialog Act Tagging

Semih Yavuz, Kazuma Hashimoto, Wenhao Liu, Nitish Shirish Keskar, Richard Socher and Caiming Xiong

EMNLP Accepted Long Paper - Findings

14. Bridging Textual and Tabular Data for Cross-Domain Text-to-SQL Semantic Parsing

Victoria Lin, Richard Socher, Caiming Xiong

- **15.**Improving Limited Labeled Dialogue State Tracking with Self-Supervision Chien-Sheng Wu, Steven C.H. Hoi, and Caiming Xiong
- **16. Composed Variational Natural Language Generation for Few-shot Intents** *Congying Xia, Caiming Xiong, Philip Yu and Richard Socher*

Accepted Workshop

17. IntEx-SemPar: 1st Workshop on Interactive and Executable Semantic Parsing

Ben Bogin, Srinivasan Iyer, Victoria Lin, Alane Suhr, Panupong Pasupat, Pengcheng

Yin, Tao Yu, Rui Zhang, Victor Zhong, Dragomir Radev, Caiming Xiong



Our Roles

(Based in Palo Alto & Singapore. 2021 Internships will be remote.)

Research Scientist, Salesforce Research

Discover new research problems, develop new models, design careful experiments and advance the future of AI. We believe that making substantive progress on hard applications can drive and sharpen the research questions we study, and, in turn, scientific breakthroughs can spawn entirely new applications.

Applied Scientist, Salesforce Research

Be at the intersection of software engineering and cutting-edge research in machine learning and artificial intelligence. Make an impact ranging from implementing research models to building rapid-prototype demos that show off applications of deep learning on production data.

Ph. D. Intern, Salesforce Research

Our Ph. D. internship offers eligible Ph. D./ MS candidates in a relevant research area an opportunity to work with a team of research scientists and engineers on projects that can lead to a submission to top-tier conferences. We look for candidates with strong backgrounds in deep learning, machine learning, natural language processing, and related fields. Location: Palo Alto & Singapore.

Lead Applied Scientist, Salesforce Einstein

Be at the intersection of software engineering and cutting-edge research in machine learning and artificial intelligence. Make an impact ranging from implementing research models to building rapid-prototype demos that show off applications of deep learning on production data. Salesforce is looking for Lead Applied Researchers (NLP/Conversational AI) with strong publication track record and/or experience in productizing cutting-edge NLP/Conversational AI research. You will work on cutting-edge AI research and build products used by millions of people every day.

Learn more at einstein.ai/careers

Our Research Areas

We research and develop AI to create breakthrough technologies for our company, our customers, and the world.

Our guiding principles for research are tightly aligned with Salesforce's core values: Trust, Innovation, Customer Success and Equality. We apply our values to our primary focus of open-sourcing cutting edge research that impacts the AI community internally at Salesforce and externally for the world. Our research areas listed below give an intro to some of our amazing projects.

Econ Al

Building the AI Economist, a new way to do economics and public policymaking with deep reinforcement learning, economic simulations, and real-world economic data.

Biomedical Al

Developing AI for prostate and breast cancer therapeutic decision-making, and for discovering novel therapies for COVID-19.

Robust NLP

We push the envelope of NLP research with robustness and ethics as our guiding principles.

Al Ops

and build products used by millions of Advancing AI and machine learning to empower and automate IT operations towards autonomous operations transformation.

Ethical Al

Developing fair, transparent, and accountable AI.

Conversational Al

and build products used by millions of Advancing AI and machine learning to empower and automate IT operations towards autonomous operations transformation.

Sample Efficient Learning

Develop machine learning methods that are sample efficient.

Business Insights

Develop recommendation models and explainable insights to provide right information to right people at the right time.

Vision

Harnesses computer vision to solve an array of use cases using pre-trained classifiers or custom models.

Language

Utilizes natural language processing to analyze intent and sentiment to better understand customer needs.

Why Salesforce?

Founded in 1999, Salesforce pioneered the revolutionary idea of replacing traditional desktop CRM software with CRM in the cloud, making it accessible anytime from anywhere. Today, our innovative cloud platform is the world's #1 CRM solution, with more than 150,000 companies blazing trails to success with us.

The way we behave – with integrity, transparency, alignment, and accountability – builds trusted relationships. We believe that companies can do well and do good in the world. We know the technology is not inherently good or bad – it's what we do with it that matters. And that's why we're making the ethical and humane use of technology a strategic initiative at Salesforce.

Learn more at salesforce.com

Collaborate with us at:

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