

Yingtao Tian

E-mail: alan.yt.tian@gmail.com

EXPERIENCE	Google DeepMind (formerly Google Brain) Research Scientist	Summer 2019 - Now
	Research on generative models and more	
	Google Brain Software Engineering Intern	Summer 2018
	Research on the latent space of generative models with Dr. Jesse Engel	
	Facebook Software Engineering Intern	Summer 2017
	Research on natural language understanding with Dr. Haixun Wang	
	Google Brain Software Engineering Intern	Summer - Fall 2016
	Research on representation learning with Dr. Stephan Gouws	
	Google Software Engineering Intern	Summer 2015
	User-generated activity profiling and analysis with Dr. Xiaomeng Ban	
	Microsoft Research Asia Research Intern	2013
	Learning representation from large knowledge base with Dr. Haixun Wang	
EDUCATION	State University of New York at Stony Brook, New York, U.S.	2014 - 2019
	Ph.D, Computer Science. Advisor: Prof. Steven Skiena	
	Fudan University, Shanghai, China.	2010 - 2014
	B.Sc., Computer Science and Technology	
PUBLICATIONS / WORKING PAPERS	Evolution Transformer: In-Context Evolutionary Optimization Robert Tjarko Lange, <i>Yingtao Tian</i> , Yujin Tang <i>The Genetic and Evolutionary Computation Conference (GECCO) 2024</i>	
	Large Language Models As Evolution Strategies Robert Tjarko Lange, <i>Yingtao Tian</i> , Yujin Tang <i>The Genetic and Evolutionary Computation Conference (GECCO) 2024</i>	
	MingOfficial: A Ming Official Career Dataset and a Historical Context-Aware Representation Learning Framework You-Jun Chen, Hsin-Yi Hsieh, Yu Tung Lin, <i>Yingtao Tian</i> , Bert Chan, Yu-Sin Liu, Yi-Hsuan Lin, Richard Tzong-Han Tsai <i>The 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP 2023)</i>	
	NeuroEvoBench: Benchmarking Neuroevolution for Large-Scale Machine Learning Applications Robert Tjarko Lange, Yujin Tang, <i>Yingtao Tian</i> <i>Thirty-seventh Conference on Neural Information Processing (NeurIPS 2023) Systems Datasets and Benchmarks Track</i>	
	Digital Typhoon: Long-term Satellite Image Dataset for the Spatio-Temporal Modeling of Tropical Cyclones Asanobu Kitamoto, Jared Hwang, Bastien Vuillod, Lucas Gautier, <i>Yingtao Tian</i> , Tarin Clanuwat <i>Thirty-seventh Conference on Neural Information Processing (NeurIPS 2023) Systems Datasets and Benchmarks Track</i>	

Evolving Collective AI: Simulation of Ants Communicating via Chemicals Ryosuke Takata, Yujin Tang, *Yingtao Tian*, Norihiro Maruyama, Hiroki Kojima, Takashi Ikegami
The 2023 Conference on Artificial Life

EEvolving Three Dimension (3D) Abstract Art: Fitting Concepts by Language *Yingtao Tian*
Working paper

DEIR: Efficient and Robust Exploration through Discriminative-Model-Based Episodic Intrinsic Rewards Shanchuan Wan, Yujin Tang, *Yingtao Tian*, Tomoyuki Kaneko
In the Proceedings of the 32nd International Joint Conference on Artificial Intelligence, IJCAI-23

Simultaneous Multiple-Prompt Guided Generation Using Differentiable Optimal Transport *Yingtao Tian*, David Ha, Marco Cuturi
In the Proceedings of the twelfth International Conference on Computational Creativity, ICCCI'22

EvoJAX: Hardware-Accelerated Neuroevolution Yujin Tang, *Yingtao Tian*, David Ha
In the Proceedings of the Genetic and Evolutionary Computation Conference (GECCO) 2022

Optimal Transport Tools (OTT): A JAX Toolbox for all things Wasserstein Marco Cuturi, Laetitia Meng-Papaxanthos, *Yingtao Tian*, Charlotte Bunne, Geoff Davis, Olivier Teboul
Working Paper

Modern Evolution Strategies for Creativity: Fitting Concrete Images and Abstract Concepts *Yingtao Tian*, David Ha
In the Proceedings of the The 11th International Conference on Artificial Intelligence in Music, Sound, Art and Design (EvoMUSART) 2022.
Machine Learning for Creativity and Design Workshop, NeurIPS 2021

Ukiyo-e Analysis and Creativity with Attribute and Geometry Annotation *Yingtao Tian*, Tarin Clanuwat, Chikahiko Suzuki, Asanobu Kitamoto
In the Proceedings of the Eleventh International Conference on Computational Creativity, ICCCI'21

KaoKore: A Pre-modern Japanese Art Facial Expression Dataset *Yingtao Tian*, Chikahiko Suzuki, Tarin Clanuwat, Mikel Bober-Irizar, Alex Lamb, Asanobu Kitamoto
In the Proceedings of the Eleventh International Conference on Computational Creativity, ICCCI'20

A Transfer-Learnable Natural Language Interface for Databases Wenlu Wang, *Yingtao Tian*, Haixun Wang, Wei-Shinn Ku
In the Proceedings of the IEEE International Conference on Data Engineering (ICDE) 2020

Learning to Represent Bilingual Dictionaries Muhao Chen*, *Yingtao Tian**, Haochen Chen, Kai-Wei Chang, Steven Skiena, Carlo Zaniolo (* Equal Contribution)
In the Proceedings of the IEEE International Conference on Data Engineering (ICDE) 2020

Enhanced Network Embeddings via Exploiting Edge Attributes Haochen Chen, Xiaofei Sun, *Yingtao Tian*, Muhao Chen, Bryan Perozzi and Steven Skiena
In Proceedings of the International Conference on Information and Knowledge Management (CIKM) 2018

Social Relation Inference via Label Propagation *Yingtao Tian*, Haochen Chen, Bryan Perozzi, Muhao Chen, Xiaofei Sun and Steven Skiena
In the proceeding of the 41st European Conference on Information Retrieval (ECIR 2019)

DeepAnnotator: Genome Annotation with Deep Learning, Mohammad Ruhul Amin, Alisa Yurovsky, *Yingtao Tian*, Steven Skiena

In Proceedings of the 9th ACM Conference on Bioinformatics, Computational Biology, and Health Informatics (ACM BCB-2018)

Simple Neologism Based Domain Independent Models to Predict Year of Authorship Vivek Kulkarni, *Yingtao Tian*, Parth Dandiwal, Steven Skiena

In Proceedings of the 27th International Conference on Computational Linguistics (COLING 2018)

Co-training Embeddings of Knowledge Graphs and Entity Descriptions for Cross-lingual Entity Alignment Muhao Chen, *Yingtao Tian*, Kai-Wei Chang, Steven Skiena, Carlo Zaniolo

In Proceedings of the 27th International Joint Conference on Artificial Intelligence (IJCAI), IJCAI/AAAI Press 2018.

Syntax-Directed Variational Autoencoder for Structured Data Hanjun Dai*, *Yingtao Tian**, Bo Dai, Steven Skiena, Le Song (* Equal Contribution)

In Proceedings of the International Conference on Learning Representations (ICLR), 2018.

Best Paper Award, NIPS 2017 workshop for Machine Learning for Molecules and Materials.

Embedding-based Relation Prediction for Ontology Population Muhao Chen, *Yingtao Tian*, Xuelu Chen, Zijun Xue, Carlo Zaniolo

In Proceedings of the 17th SIAM International Conference on Data Mining (SDM), SIAM 2018.

Towards End-End Generation of High-Resolution Images with Generative Adversarial Networks [Online Demo] Yanghua Jin, Jiakai Zhang, Minjun Li, *Yingtao Tian*, Huachun Zhu

Accepted and presented in spotlight, NIPS 2017 workshop for Machine Learning for Creativity and Design.

Multilingual Knowledge Graph Embeddings for Cross-lingual Knowledge Alignment Muhao Chen, *Yingtao Tian*, Mohan Yang, Carlo Zaniolo.

In Proceedings of the 26th International Joint Conference on Artificial Intelligence (IJCAI), IJCAI/AAAI Press 2017.

PROFESSIONAL **Organizer**, *NeurIPS 2022, 2023 Workshop on Machine Learning for Creativity and Design*

SERVICES **Meta-Reviewer**, *AAAI*

Reviewer, *ICLR, NeurIPS, AAAI, IJCAI, LREC, COLING*

PATENTS **US20210398336A1** Method for generating image, image generator, and program

US10810493B1 Training and/or utilizing recurrent neural network model to determine subsequent source(s) for electronic resource interaction

WO2022066156A1 Node embedding via hash-based projection of transformed personalized pagerank

HONORS AND **27th place**, 35th Annual World Final of the ACM-ICPC, 2011

AWARDS **Gold Medal**, ACM-ICPC Asia Chengdu Regional Contest, 2011

Championship and Gold medal, ACM-ICPC Asia Amritapri Regional Contest, 2010