

I-Ta Lee

<https://doug919.github.io>

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LIFE PHILOSOPHY

"A man's worth is no greater than his ambitions." –Marcus Aurelius

EDUCATION

PURDUE UNIVERSITY**PH.D. IN COMPUTER SCIENCE**

Expected Aug. 2015 - May 2020

West Lafayette, IN

PurdueNLP Lab.

GPA: 3.82 / 4.0

NATIONAL TSING HUA UNIVERSITY**M.S. IN COMPUTER SCIENCE**

Sep. 2008 - Aug. 2010

Hsinchu, Taiwan

Wireless Mobile Network Lab.

GPA: 4.0 / 4.0

YUAN ZE UNIVERSITY**B.S. IN COMPUTER SCIENCE & ENGINEERING**

Sep. 2004 - June 2008

Taoyuan, Taiwan

GPA: 3.96 / 4.0

SKILLS

PROGRAMMING

Proficient:

Python • C • C++ • Java

Git • Shell • PyTorch • Tensorflow

Familiar:

Visual Studio • Makefile • Batch

Past:

System Programming • Socket

Embedded Systems • TCP/IP

RESEARCH

Natural Language Processing

Deep Learning • Machine Learning

Embeddings • Commonsense Modeling

Sequence Modeling

STRENGTHSHard-working (18/24) • Responsibility
Leadership**LANGUAGES**

English • Chinese

RESEARCH

PURDUE NLP LAB. | RESEARCH & TEACHING ASSISTANT

Aug. 2015 - Present | West Lafayette, IN

- Research: Modeling Human Commonsense through Statistical Script Learning

- Our proposed embedding model outperformed state-of-the-art by 30% for predicting the next event

- Teaching: Deep Learning, Object-Oriented Programming in Java, C Programming

NLP LAB @ ACADEMIA SINICA | RESEARCH ASSISTANT

Jan. 2015 - July 2015 | Taipei, Taiwan

- Emotion Analysis on Text.

- Learning and visualizing emotional transitions for articles.

WMNET LAB. @ NTHU | RESEARCH & TEACHING ASSISTANT

2009 - 2010 | Hsinchu, Taiwan

- Multi-cast Routing, Wireless Ad Hoc Networks, Vehicular Ad Hoc Networks

EXPERIENCE

HEWLETT PACKARD ENTERPRISE | RESEARCH INTERN

May 2017 - Aug. 2017 | Sunnyvale, CA

- Our cluster-based Attention Seq2Seq LSTM improved anomaly detection on netflow data by 40%.

TRENDMICRO INC. | SENIOR SOFTWARE ENGINEER

Oct. 2013 - Sep. 2014 | Taipei, Taiwan

- Developed the first release of TrendMicro Endpoint Sensor (APT solutions).

MOXA INC. | SENIOR SOFTWARE ENGINEER

Oct. 2010 - Sep. 2013 | New Taipei City, Taiwan

- Software development for networking devices (TCP/IP, UART, Zigbee)
- Led software development for the first generation of Moxa Zigbee devices. Presented the design to 400+ engineers.

PUBLICATIONS

- I-Ta Lee, and Dan Goldwasser, "FEEL: Featured Event Embedding Learning," in AAAI (2018)
- Kristen Johnson, I-Ta Lee, and Dan Goldwasser, "Ideological Phrase Indicators for Classification of Political Discourse Framing on Twitter," in NLP+CSS (2017)
- I-Ta Lee, et al., "PurdueNLP at SemEval-2017 task 1: Predicting Semantic Textual Similarity with Paraphrase and Event Embeddings," in SemEval (2017)
- Maria L. Pacheco, I-Ta Lee, Xiao Zhang, A. K. Zehady, P. Daga, Di Jin, A. Parolia, and D. Goldwasser, "Adapting Event Embeddings for Implicit Discourse Relation Recognition," in CONLL (2016)
- I-Ta Lee, Tzu-Yi Lin, Yu-Lu Liu and Tein-Yaw Chung, "A Design and Implementation of an iSCSI-based Wireless Remote Video Storage System," in National Computer Symposium (2007)
- I-Ta Lee, Guann-Long Chiou, and Shun-Ren Yang, "A Cooperative Multicast Routing Protocol for Mobile Ad Hoc Networks," in Elsevier Journal of Computer Networks, Volume 55, Issue 10, 14 July 2011, pp. 2407-2424.

PROJECTS

FEEL: FEATURED EVENT EMBEDDING LEARNING

FEB. 2018 | AAAI 18' | NEW ORLEANS, LA

<https://goo.gl/MQpD2G>

- feature-enriched event embeddings for commonsense inference

FEATURE LEARNING FOR SECURITY DATA

AUG. 2017 | HPE | SUNNYVALE, CA

<https://goo.gl/T5oSAQ>

- threat detection in netflow data using LSTM+attention

PREDICTING SEMANTIC TEXTUAL SIMILARITY WITH PARAPHRASE AND EVENT EMBEDDINGS

AUG. 2017 | SEMEVAL 17' | VANCOUVER, CANADA

<https://goo.gl/iaKdfY>

- learning skip-gram event embeddings and paraphrase embeddings with DSSM-like convolutional neural networks

ADAPTING EVENT EMBEDDINGS FOR IMPLICIT DISCOURSE RELATION RECOGNITION

AUG. 2016 | CoNLL 16' | BERLIN, GERMANY

<http://goo.gl/ATc279>

- improved implicit discourse relation classifications by event embeddings

DEEP DISCOVERY ENDPOINT SENSOR V1.0

2014 | TRENDMICRO INC. | TAIPEI, TAIWAN

<http://goo.gl/R5agpR>

- a large-scale C++-based software solution for threat detection
- based on YARA—an open-source memory scan and hook solution

ZIGBEE NETWORK GATEWAY AND CONVERTER

2013 | MOXA INC. | NEW TAIPEI CITY, TAIWAN

<http://goo.gl/7l1kCX>

- developed a family of Zigbee devices
- implemented with C language on two real-time operating systems.

AIR POLLUTION SENSING SYSTEM IN VEHICULAR AD HOC NETWORK

2010 | NTHU | NEW TAIPEI CITY, TAIWAN

<http://goo.gl/yDPezC>

- led a team to implement a client-server architecture to collect air quality sensor data from vehicles.

A MALICIOUS MESSAGE FILTER ON MSN LIVE MESSENGER

2007 | YZU | TAOYUAN, TAIWAN

<http://goo.gl/Dnhukk>

- a malicious message filter based on Naïve Bayes classifier in an instant messaging client

HONORS

AWARDS

- Presidential Awards from Yuan Ze University (x4) (ranked 1/126 each year)
- Honorary Member of the Phi Tau Phi Scholastic Honor Society
- Certificate of Outstanding Achievement in IEEE Yuan Ze University Student Branch

SCHOLARSHIPS

- Student Scholarship Program from AAAI 2018
- Great Academic Achievement from Yuan Ze University (x3)
- Great Academic Achievement from Inventec Appliances OKWAP
- Great Academic Achievement from LiMing Corporation (x3)
- Taipei Zhong Zhen Foundation (x2)