



# SIMIN CHEN

+1 214-3569-114

<http://www.chensimin.site/>

<https://github.com/SeekingDream>

## EDUCATION

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<b>Ph.D. Candidate</b>   (GPA 3.82/4.0) University of Texas at Dallas	Jan. 2019 – Now Dallas, The United States
<b>Master of Science</b>   (GPA 84.7/100) Tongji University	Sep. 2015 – Jun. 2018 ShangHai, China
<b>Bachelor of Science</b>   (GPA 4.48/5.0) Tongji University	Sep. 2011 – Jun. 2015 ShangHai, China

## PROJECTS AND RESEARCH

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<b>DENAS: Automated Rule Generation by Knowledge Extraction from Neural Networks</b> Explainable ML, DL for SE Application   <i>Python, Keras, Malware Analysis, Reverse Engineering</i>	Spring 2019
<b>GAET: Towards Automatically Characterizing the Reusability of Code Embeddings</b> DL for SE applications, Embedding   <i>Python, Pytorch, Embedding Analysis, Code Analysis</i>	Fall 2020
<b>NMTSloth: Exploiting the Availability Vulnerability in Neural Machine Translation Systems</b> Adversarial ML, NLP   <i>Python, Pytorch, Language Generative Model</i>	Spring 2021
<b>NICGSlowDown: Evaluating the Efficiency Robustness of Caption Generation Models</b> Adversarial ML, DNN Efficiency   <i>Python, Pytorch</i>	Fall 2021
<b>CodeGenExp: Explain Deep Learning Based Code Generation Applications</b> Explainable ML, DL for SE Application   <i>Python, Pytorch, Code generation</i>	Spring 2022
<b>ADNNCL: Enable Deep Learning Compiler for Adaptive Neural Networks</b> DL Compiler, DL for SE Application   <i>Python, Pytorch, Program analysis</i>	Spring 2022

## PUBLICATION

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<b>DENAS:Automated Rule Generation by Knowledge Extraction from Neural Networks</b> <b>Simin Chen</b> , Soroush Bateni, Sampath Grandhi, Xiaodi Li, Cong Liu, Wei Yang. <a href="#">[Paper]</a> , <a href="#">[Code]</a> , <a href="#">[Video]</a>	ESEC/FSE 2020
<b>NICGSlowDown: Evaluating the Efficiency Robustness of Neural Caption Generation Models</b> <b>Simin Chen</b> , Zihe Song, Mirazul Haque, Cong Liu, Wei Yang. <a href="#">[Paper]</a> , <a href="#">[Code]</a>	CVPR 2022

## IN SUBMISSION

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<b>A Empirical Study of The Reusability of the Pre-trained Code Embeddings</b> <b>Simin Chen</b> , Yufei Li, Cong Liu, Wei Yang.	Under Submission
<b>CodeGenExp: Explain Deep Learning Based Code Generation Applications</b> <b>Simin Chen</b> , Zexin Li, Cong Liu, Wei Yang.	Under Submission
<b>Estimating Predictive Uncertainty Under Program Data Distribution Shift</b> Yufei Li, <b>Simin Chen</b> , Cong Liu, Wei Yang.	Under Submission

## WORK EXPERIENCE

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### Teaching Assistant

University of Texas at Dallas

January 2019 – December 2021

- CS 4393 – Computer and Network Security
- CS 4347 – Computer Engineering
- CS 6301 – Special Topics in Computer Science (Graduate Course)

### Internship

NEC Laboratories America

January 2020 – May 2020

- Participate in the Graph-based Source Code Vulnerability Detection
- Member of System Security and Reliability Team

Microsoft Research

May 2021 – July 2021

- Participate in the project of reverse engineering on on-device DNNs
- Member of System Security and Reliability Team

## SKILLS

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**Programming:** Python (Pytorch, Tensorflow), MATLAB, C/C++ , Java

**Program Analysis Tool:** Angr, Joern

**DL Techniques:** NLP, Uncertainty Analysis, Explainable ML, Energy-efficient DNN