

# YINLIN DENG

2179531497 | yinlind2@illinois.edu

## EDUCATION

---

**University of Illinois Urbana Champaign**

August 2021–present

Ph.D. Student in Software Engineering

**Peking University**

September 2017–June 2021

Bachelor of Science in Computer Science, Turing Class

- Enrolled in **Turing Class**
- GPA: 3.76/4.0 (top 10%)

## RESEARCH INTEREST

---

Software Engineering, and its synergy with Machine Learning, Programming Languages, and Formal Methods.

## PUBLICATIONS

---

**Free Lunch for Testing: Fuzzing Deep-Learning Libraries from Open Source**

Anjiang Wei, **Yinlin Deng**, Chenyuan Yang, and Lingming Zhang

*Proceedings of the IEEE/ACM International Conference on Software Engineering, 2022*

**Coverage-Guided Tensor Compiler Fuzzing with Joint IR-Pass Mutation**

Jiawei Liu, Yuxiang Wei, Sen Yang, **Yinlin Deng**, and Lingming Zhang

*Proceedings of the ACM SIGPLAN Conference on Object-Oriented Programming Systems, Languages, and Applications, 2022*

## SELECTED HONORS & AWARDS

---

**Gold Medal** in the International Collegiate Programming Contest(ICPC) Asia-East Continent Final contest 2019

**Gold Medal** in the ICPC Asia Regional Contest Nanjing Site 2019

**Silver Medal** in the ICPC Asia Regional Contest Qingdao Site 2017

University-level scholarships and merit student in Peking University

## PROFESSIONAL EXPERIENCE

---

**Microsoft Research, Asia**

June 2020–Jan 2021

Research Intern, Data Knowledge Intelligence (DKI) Group

Beijing, China

Developed advanced table range detection techniques to understand spreadsheet data for intelligence service

- Researched on and improved table detection with machine learning and deep learning algorithms
- Developed effective and efficient code for tech-transfer to Microsoft products like **Excel**

**Google**

July 2019–September 2019

Student Training in Engineering Program Intern

Beijing, China

Researched on static model compression to improve efficiency in Federated Learning

- Researched and implemented model compression algorithms using probabilistic encoders and decoders.
- Set up and conducted large-scale experiments; Analyzed and visualized the results.
- Contributed to **TensorFlow Model Optimization Toolkit**

**Peking University**

September 2019–January 2020

Teaching Assistant

Beijing, China

TA in the course Introduction to Computer Science

## ADDITIONAL INFORMATION

---

**Language**

English (fluent), Chinese (native), German (conversational)

**Technical Expertise**

C++, C#, Python, Java, JavaScript, TensorFlow, Latex

**Interests**

Volleyball and running