

Yongming Ding

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EDUCATION

CARNEGIE MELLON UNIVERSITY

M.S. IN INFORMATION TECHNOLOGY
(MOBILITY)

2018.8 – 2020.5 | Pittsburgh, PA

- GPA: N/A
- CMU INI Scholarship

SHANGHAI JIAO TONG UNIVERSITY (SJTU)

M.S. IN ELECTRONIC SCIENCE AND TECHNOLOGY

2016.9 – 2019.3 | Shanghai, China

- Major GPA: 3.86/4 Overall GPA: 3.72/4
- SJTU Tang Youshu Scholarship
- SJTU First-class Academic Graduate Student Scholarship

B.ENG. IN MICROELECTRONICS

2012.9 – 2016.6 | Shanghai, China

- Major GPA: 3.77/4 Overall GPA: 3.57/4
- SJTU Scholarship of Academic Excellence

PROGRAMMING SKILLS

PROFICIENT:

- Python • C

FAMILIAR:

- C++ • HTML/CSS • Javascript • SQL

TECHNOLOGIES:

- Django • MySQL • Bootstrap • Git

COURSEWORK

CMU (*CURRENT)

Introduction to Computer System (A)

Web Application Development*

Storage Systems*

Introduction to Information Security*

Fundamentals of Computer Networks*

SJTU

Operating System (A)

The practice of Operating System (A)

Computer Architecture and Embedded System (A)

Advanced Computer Architecture (A)

Algorithm and Compiler (A)

Machine Learning (A)

Fundamentals of Multimedia (A)

WORK EXPERIENCE

TENCENT | SOFTWARE ENGINEERING INTERN

2018.4 – 2018.6 | Shanghai, China

- Worked in YouTu Lab belongs to the Tencent Social-Network-Group(SNG).
- Participated in developing an intelligent lung cancer screening system.
- Finished full-stack web development using Django, Vue, and MySQL.
- Deployed it with Nginx at Fudan University Shanghai Cancer Center.

CTRIIP | SOFTWARE ENGINEERING INTERN

2015.7 – 2015.12 | Shanghai, China

- Worked in Application Management Group of Ctrip Infrastructure Service.
- Constructed "Alert-Subscribe", an alert event subscription system helping DevOps engineers fix alert events.
- Completed the back-end job including obtaining alert events, classifying with RegEx and sending notifications.
- Built "Prometheus", a web service cluster consumers display platform to show the dependency relationships between clusters.
- Implemented it independently using Django, Bootstrap, MySQL, and Redis.

RESEARCH EXPERIENCE & PROJECTS

SHORT PATH PADDING TECHNIQUE DESIGN

2016.7 – 2017.11 | Research Center of Digital Circuit Design & SoC | SJTU

- Designed and implemented a short path padding software employing integer linear programming method. Proposed innovative schemes to reduce 80.9% runtime of the algorithm and 52.3% hardware cost.
- **Publication:** Yongming Ding, Wei Jin, Guanghui He, Weifeng He. "Short Path Padding with Multiple-Vt cells for Wide-Pulsed-Latch Based Circuits at Ultra-Low Voltage." IEEE International Conference on ASIC (2017).

C DYNAMIC STORAGE ALLOCATOR | MALLOC LAB

2018.7 | 15513 Introduction to Computer System | CMU

- Implemented a general purpose dynamic storage allocator for C programs (malloc function) using segregated free list with FIFO strategy.
- By eliminating footers in allocated blocks, decreasing the minimum block size, and setting up special regions of memory for small, fixed-size blocks, achieved a high throughput 16838 Kpos/sec with 71.4% memory utilization.

EYE OF PROVIDENCE | AN INTELLIGENT MONITORING SYSTEM

2017.5 | Hackathon SJTU 2017

- Led a group of 4 built an intelligent classroom monitoring system, which can automatically detect sleepy students and record them in the database, using face recognition and facial expression detection techniques.
- Used speech identification method to offer several voice control commands.

HONORS AND AWARDS

- 1st Prize in 12th China Graduate Electronics Design Contest
- 3rd Prize in 14th National Post-Graduate Mathematic Contest in Modeling
- 2nd Prize in 30th National College Student Physics Competition (Shanghai)
- 1st Prize in 28th National Olympiad in Physics (Henan Province)