

Yongming Ding

yongmind@andrew.cmu.edu | 412-209-5646 | 5030 Centre Ave, Apt. 255, Pittsburgh, PA 15213

EDUCATION

CARNEGIE MELLON UNIVERSITY

Information Networking Institute

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

LANGUAGES:

- Python • C • C++
- HTML/CSS • Javascript • SQL

TECHNOLOGIES:

- Django • Tornado • MySQL • Node.js
- Bootstrap • Element-ui • Vue.js • Git
- TensorFlow • NumPy • Scikit-Learn

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).
- Implemented the web service of an intelligent lung cancer screening system with Django, Vue.js, Element-ui, and MySQL.
- Deployed it with Nginx at Fudan University Shanghai Cancer Center.

CTRIP | SOFTWARE ENGINEERING INTERN

2015.7 – 2015.12 | Shanghai, China

- Worked in Application Management Group of Ctrip Infrastructure Service.
- Constructed an alert subscription system helping DevOps fix alert events.
- Built "Prometheus", a web service cluster consumers display platform.
- Developed the Ajax based front-end with AngularJS and Bootstrap.
- Implemented MVC backend with Django and backend job queue with Celery.

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 and decreasing the minimum block size, achieved a high throughput 16838 Kpos/sec with 71.4% memory utilization.

EYE OF PROVIDENCE | AN INTELLIGENT CLASS MONITORING SYSTEM

2017.5 | Hackathon SJTU 2017

- Built an monitoring system which detects sleepy students and records them automatically, using face recognition and facial expression detection.
- Implemented MVC back-end with Tornado and front-end with Semantic UI.

MINIX3 SYSTEM MODIFICATION Operating System | SJTU

- Added a new system call to Minix3.1.8 and customized the scheduling mechanism to allow change priority according to time consumption.
- Modified the C source code, changed Makefile and recompiled Minix kernel.

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)