# Hanyu Yang

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#### **OBJECTIVE**

I'm a graduate student at CMU looking for full-time job of Software Development Engineer. I aspire to apply my knowledge into Cloud Computing and Artificial Intelligence areas to pursue a smarter life.

## **EDUCATION**

# Carnegie Mellon University, Pittsburgh, PA & Silicon Valley, CA

Master of Science in Information Technology, Mobility, August 2016 - Expected December 2017

Course: Introduction to Computer Systems (15513), Web Application Development (15637), Telecommunications & Computer Networks (14740), Cloud Computing (15619), Distributed Systems (15640), Computer Vision Apps (16423)

#### Singapore Management University, Singapore

Exchange, Information Systems, August - December 2015

#### Zhejiang University, Hangzhou, China

Bachelor of Engineering, Computer Science, September 2012 - July 2016

### **EXPERIENCE**

# **Software Development Engineer Intern (Java)**

Amazon Web Services, Seattle, WA, May - August 2017

- Added a feature to do exponential waves deployment using DynamoDB and SWF at AWS RDS
- Built a song quiz Alexa skill at Global Intern Hackathon 2017

# Linux Programmer, Assist in programming tasks for Mellon College of Science (Python)

Carnegie Mellon University, Pittsburgh, PA, October 2016 - June 2017

- Used procmail recipes to filter emails of server logs and wrote real-time scripts to analyze anomaly
- Contributed to paper Preemptive Infrastructure Maintenance Through Adaptive Pattern Search

# Research Student, Experimental Evaluation for Pivot-based Metric Index (C++)

Singapore Management University, Singapore & Zhejiang University, China, September 2015 - May 2016

- Implemented three index structures (LAESA, CPT, EP) for two metric similarity geuries (Range, kNN)
- Improved query performance by replacing Pivots Selecting Algorithms for three index structures

#### Back-end Engineer (Intern), Cross-Border e-Commerce Web Application (Java)

Jiayun Data Science and Technology, Hangzhou, China, May - July 2015

- Developed back-end business logic and data access based on Spring and Hibernate framework
- Generated automated scripts for back-end request and response testing with Jmeter

# **PROJECT**

# Nano Blogging Site (Django)

Carnegie Mellon University, Fall 2016

 Built a Twitter like nanoblogging site Grumblr with Django MVC design, and features like ModelForm, Signals and AJAX updates.

# Map Calendar Web Application (JavaScript)

Carnegie Mellon University, Fall 2016

• Undertook the map interactions and logic design for page synchronization of a Location-based calendar web app using Mapbox API.

# **Dynamic Memory Allocator (C)**

Carnegie Mellon University, Fall 2016

• Overwrote the system level Dynamic Storage Allocator, to allocate (malloc), reclaim (free), split, and coalesce memory space from heap.

# Computer Vision based Sudoku (C++/OpenCV)

Carnegie Mellon University, Spring 2017

 Built an iOS application with OpenCV libraries to let users interact with a printed Sudoku puzzle on their devices.

#### **Twitter Analytics Web Service (Java)**

Carnegie Mellon University, Spring 2017

• Designed a web service from ETL to backend schema optimization on AWS to support queries with throughput and budget requirement.

# File Caching Proxy (Java)

Carnegie Mellon University, Spring 2017

 Implemented a Proxy with LRU Cache Replacement Policy and Check on Use Cache Consistency approach

#### **SKILL**

- Programming/Scripting Languages: Java, Python, C/C++, JavaScript, HTML, CSS, SQL
- Frameworks and Tools: AWS, Git, Django, OpenCV, Ruby-on-Rails, JQuery, Docker, Spark, Kafka