YIYUN YAO

SOFTWARE ENGINEER

yiyunyao@live.com   412-880-9667   https://yyypasserby.github.io

EDUCATION

M.S in Information Networking, Carnegie Mellon University   2016-08 — 2018-05

QPA: 3.69/4.0 TAs for Web Apps Dev and Advanced Cloud Computing
Web Apps Dev, Software Construction, Cloud Computing, Machine Learning, Distributed Systems

B.E in Software Engineering, Southeast University   2012-09 — 2016-06

QPA: 3.79/4.0 Rank 1st/137
Data Structures, Compilers, Operating Systems, Software Engineering, Software Tests

SKILLS

WEB DEV   JAVASCRIPT, REACT, NODE.JS, DJANGO

BACKEND   C, C++, JAVA, PYTHON

EMPLOYMENT

Software Engineering Intern, Google   2017-05 — 2017-08

Enabled and customized a serverside-controlled A/B testing framework in Android WebView

- Built an Android JobService to fetch regular data in background to optimize battery usage
- Developed an Android Service to share large common data among WebView processes to reduce data usage
- Designed the IPC protocol between WebViews and Service to keep them work independently
- Updated the dashboard to visualize and aggregate event data for Android WebView platform

Android, WebView, JNI, A/B Test, Java, Go

Software Engineering Intern, Microsoft   2015-07 — 2016-01

Worked in OpenPublish Team to help build an automated solution for documentation publishing.

- Designed and built a single-page application using AngularJS to track and manage documentation builds
- Developed a tool to preview the documentation locally using C# and Mustache
- Built the online log viewing feature and the corresponding RESTful API using AngualrJS and C#

AngularJS, C#, Mustache, Python

PROJECTS

Lead Programmer, Millers Hollow Online

Best Project of Web Apps Dev

- Created a website to play offline board game Werewolves of Miller's Hollow in the browser using Video calls
- Developed a video communication mechanism with WebRTC to support 9 people playing the game together
- Implemented a complete set of game logic with Vanilla JavaScript and real-time updates of UI with jQuery and WebSocket

Vanilla JavaScript, jQuery, Django, Channels, WebRTC, WebSocket

Team Leader, HackShanghai - Chrome Theatre

Rank 2nd/60 in the largest 24-hour Hackathon in China

- Proposed a new way and a feasible solution to control online videos playing remotely using Android phones
- Developed a Chrome extension with Reveal.js and AngularJS to organize videos into watchlists based on user interest
- Built a WebSocket server in the Chrome extension to receive status from Android device through WebSocket

Reveal.js, AngularJS, Chrome Extension, WebSocket

Personal, RE2DFA Visualization

Built a handy tool to visualize the conversion process from Regular Expression(RE) to Minimized Deterministic Finite Automaton(min-DFA)

- Implemented the algorithm in Python to generate NFA/DFA/min-DFA from basic Regular Expressions
- Visualized the NFA/DFA/min-DFA as state machine diagrams in SVG with NetworkX and Graphviz
- Developed a easy-to-use website with Django to let user interact with the process

Regular Expression, min-DFA, NetworkX, Graphviz, Python, Django