

Kuixi Song

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Education

Carnegie Mellon University, Information Networking Institute Pittsburgh, PA, 08/2019 – Expected 05/2021

Master of Science in Information Technology – Mobility; GPA: 3.90 / 4.00

Courses: *Intro to Computer Systems; Intro to Machine Learning; Distributed Systems; Search Engines; Intro to Information Security*

Nanjing University, Software Institute Nanjing, Jiangsu, China, 09/2015 – 06/2019

Bachelor of Engineering in Software Engineering; GPA: 4.40 / 5.00; Ranking: Top 10%

Courses: *Data Structure and Algorithm; Operating System; J2EE; Software Engineering and Computing; Software System Design*

Skills

iOS Development, Swift, Objective-C, Java / Java EE, C, Python, Golang, Machine Learning, Search Engines, SQL, C++, C#, React

Work Experience

LinkedIn Mountain View, CA, 05/2020 – 08/2020

Software Engineer Intern, Group of Voyager-iOS, Flagship Division

- Designed and created a badge view and a pending join member list on group management page to improve admin's visibility of the requests to join the group, thus increasing the request acceptance rate.
- Refactored the network fetching workflow of sending kudos to other users in the LinkedIn iOS app, enhanced user experience by adding error placeholder views, increased network efficiency and decreased user-perceived loading time.
- Developed in Swift and Objective-C respectively; coordinated with India team for initial UI design and code review.

Microsoft (China) Co., Ltd. Suzhou, Jiangsu, China, 10/2018 – 12/2018

Software Engineer Intern, Group of Xiaoice, Artificial Intelligence Creation Division

- Transformed MIDI files to formatted texts, performed melody extraction and chord detection in Python to produce training data.
- Generated music pieces from user inputs based on data fed and trained by a seq2seq model.

Goldman Sachs (Asia) L.L.C. Hong Kong, China, 07/2018 – 09/2018

Summer Analyst, Mobile Team, Platform Division

- Built a React app to scan and extract information from business cards with OCR API and save results to users' mobile phones.
- Dealt with all phases of software engineering, including requirement engineering, design, development, testing and deployment.
- Cooperated with international teams across regions and time zones for collaborative design and code review.

Academic & Personal Projects (Selection)

A Golang distributed bitcoin miner based on a client-server protocol, from course *Distributed Systems* 10/2020

- Implemented a UDP variant which ensures communication reliability and integrity with sequence number and checksum.
- Built a simple distributed bitcoin miner which provides fault tolerance and load balancing across servers using segregated lists.

ChaReader, Available in the App Store, written in Swift 09/2020

- Built an iOS app to import articles from images, webpages, documents and convert article texts to audios using AVFoundation.
- Uses Grand Central Dispatch to export reading audios to mp3 files in parallel within < 15% time of when using a single thread.

A Java lucene-based search engine, from course *Search Engines* 04/2020

- Implemented a lucene-based search engine with multiple ranking algorithms including Ranked Boolean, BM25, Indri, LeToR.

ARTargetShooting, Secured 2018 Apple Worldwide Developer Conference Scholarship 05/2018

- Added virtual objects in augmented reality with ARKit and SceneKit, creating an immersive AR shooting game experience.

Keeping!, Available in the App Store, written in Objective-C 02/2017

- Developed a daily task management iOS app to check daily jobs, track the progress of ongoing work and simplify workflow.
- Utilizes iOS features including local notifications and URL Schemes to provide a seamless user experience to complete tasks.

JapaneseWordbook, Available in the App Store, Recommended in App Store in 06/2018 03/2016

- Built a Japanese vocabulary iOS app which allows users to import new words into lists and do exercise with them.
- Refactored in past 4 years continuously to modify architecture and enhance stability to achieve crash-free session rate > 99.9%.
- Written in Objective-C with a MVVM pattern; built a Python Django server for word search; used SQLite for local database.
- Accumulated a userbase more than 95,000.

Honors and Awards

2018 WWDC Scholarship, Received for *ARTargetShooting* project

2017 Championship and Best Individual of iQiyi National Programmer Contest

2016 People's Scholarship of Nanjing University