

YuDing Sun

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EDUCATION

University of Southern California, Los Angeles, CA Dec 2017 (Expected)
M.S. in Computer Science
University of Electronic Science and Technology of China, Chengdu, China Jun 2015
B.S. in Optical Information Science, *Rank 2/30, People Scholarship*
University of California Los Angeles, Los Angeles, CA Aug 2013
Extension Certificate

WORK EXPERIENCE

Amazon, Seattle, WA, *Software Develop Engineer Intern (IntelliJ; Java)* May 2017 - Aug 2017

- Created a command line tool ATVDDataLabFirehoseCli which can generate test events and publish user behavior events to AWS Kinesis stream
- Used Jackson for JSON serialization and deserialization
- Created SampleEventsFirehose using ATVDDataLabFirehose buffer fetching data from Kinesis and sending messages to AWS SQS standard queue for storage
- Created integration tests for the ATVDDataLabFirehose pipeline including event content test and buffering test

Data Application Lab, Los Angeles, CA, *Software Develop Engineer Intern (Jupyter Notebook; Python)*
Nov 2016 - May 2017

- Worked as a QA about a complex web systems with Jupyter Notebook as the core in the backend
- Created backend Python unit tests for user codes

Freyt Optoelectronics Technology, Chengdu, China, *Algorithm Researcher Intern* Jun 2015 - Aug 2015

- Worked in a team responsible for the a design and verification of a 3D scanning product
- Designed algorithms (e.g., correlation matching) to improve the efficiency and accuracy of 3D scanning
- Evaluated test data of a test case and model performance and analyzed feature importance to identify top factors that influenced the results

PROJECTS

Implementation of a Monolithic Kernel, Weenix | Operating System, USC Spring, 2017

- Worked in a team to implement Weenix OS, a Unix kernel
- Completed processes and thread, virtual file system and virtual memory

Mobile Game – Augmented Reality Multiplayer iOS Game, *Lead Engineer* May 2016 - Jul 2016

YouTube: <https://www.youtube.com/watch?v=5kF1MeNcfyg>

- Designed and developed an iOS game using Unity 3D
- Implemented augmented reality using Vuforia
- Assisted in the designing of multiplayer game

Artificial Intelligence – Navigation System, *Programmer* Aug 2016 - Sep 2016

- Parsed the data file of traffic information
- Developed a navigation system using related search algorithm(e.g. BFS, DFS, UCS and A*)

Networks – P2P Network System, *Programmer* Mar 2016 - May 2016

- Developed a peer-to-peer system on a hybrid architecture of TCP and UDP sockets

Vision – Airplane Tracking System, *Programmer* Mar 2014 - Jun 2014

- Solved problems of image recognition, target detection, location and tracking frame centroid
- Realized real-time steady tracking of moving airplane in series images

TECHNICAL SKILLS

- Programming Languages: Java, Python, SQL, C, C++, MATLAB, XML, JSON
- Tools: IntelliJ, Eclipse, Git, AWS, MySQL, Wireshark, Unity 3D, Matlab, Hadoop, Pig, Hive
- Relevant Course: Computer Network, Algorithm, Database, Mobile Game, A.I., Software Development Management, Operating System