

# Junfei Yu

SOFTWARE ENGINEER · COMPUTER ENGINEERING

Hinman 4883, Dartmouth College, Hanover, NH

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## Education

### Dartmouth College

Hanover, NH

B.E. IN COMPUTER ENGINEERING

Sep. 2016 - Mar. 2019 (Expected)

### Wheaton College

Norton, MA

B.A. IN COMPUTER SCIENCE

Aug. 2014 - June 2016

- **Courses taken:** Data Structures, Algorithms, Computer Systems, Human Computer Interaction, Machine Learning, Database Systems, Probability, Multivariable Calculus, Linear Algebra, Software Design and Implementation, Statistical Methods in Engineering.
- **Programming language:** (Proficient) C/C++, Matlab, Python | (Familiar) SQL, Java | Platform: Linux, Windows, Mac OS
- **Extracurricular:** Basketball (helped Dartmouth Woman's Team training during 2016-2017), traveling (have been to five continents).

## Professional Experience

### Xintiandi Innovation Center

Shanghai, China

SUMMER INTERN

May. 2017 - July 2017

- Produced web contents by using WeChat APIs. Marketed the company brand on social media WeChat and increased 500+ followers in a month.
- Increased the number of memberships for using 3D printer and other engineering instruments at the innovation center by half through innovative recruitment efforts.

## Projects

### Smart Spray Deicers Systems

Dartmouth College, Hanover, NH

CO-FOUNDER AND ENGINEER

Feb. 2018

- Co-founder of Smart Spray Deicers Systems, a start-up project at Thayer School, which is a computerized system to optimize the deicers for the real-time conditions on the road. Coded in C for the Arduino prototype, developed features and functionalities, developed benchmark test and improved prototypes with iterations with four teammates.

### Tiny Search Engine

Dartmouth College, Hanover, NH

PROGRAMMER

Feb. 2018

- Implemented a tiny search engine which has three parts: crawler, indexer and querier. Within a certain range of webpages, the user could use it to search for a sequence of words containing logical expressions and get the result as the pages relevant to the search in descending order.

### Database

Brown University, Providence, RI

PROGRAMMER

Dec. 2017

- Used TCP protocol to build connections among the client, the server and the database, which was implemented as a binary search tree. Multiple client threads could run concurrently and get access to the same database. Topics such as memory leak, mutual exclusion, thread cancelation and clean-ups were safely considered.
- The inputs from the client window would be transferred to the server through the TCP pipe. On the server side, the server would call an interpretation function to interpret the commands from the client. The corresponded actions are done.

### C Shell

Brown University, Providence, RI

PROGRAMMER

Nov. 2017

- Designed and implemented a C shell running on Linux system, which allows the users to run programs in a friendly environment. It offers features such as running built-in shell commands, input/output file redirection and input error checking. This C shell is able to handle multiple processes by running one in the foreground and some on the background concurrently, as well as managing processes with signal handling.