Yufan WANG

Mobile: (+86) 130-2129-8966 | Email: <u>yufanwang0703@gmail.com</u>

Personal Website: https://yufanwangyuki.github.io/

EDUCATION

Beijing University of Posts and Telecommunications (BUPT)

Beijing, China

Bachelor's degree in Internet of Things Engineering

Jun. 2020 (Expected)

GPA: 89.18/100 (WES: 3.81/4.0) **Ranking**: 3/192

Relevant Courses: Probability Theory & Stochastic Processes, Advanced Mathematics, Operations Research, Linear Algebra, Discrete Techniques for Computing, Intro Java Programming, Introduction to Computing and How to Program, Information Processing Technology on Internet of Things, and Data Structures.

RESEARCH

Glaucoma Diagnosis Using Stereoscopic Fundus Images with Deep Learning Methods, *Renmin University of China*Beijing, China

Independent Researcher

Mar. 2019 – Present

- Used U-Net as benchmark to obtain optic disc and cup from stereoscopic fundus images and to sift and extract local features.
- Combined Convolutional Neural Network models (ResNet, VGG, Inception) with Long Short Term Memory, and modified other semantic segmentation models designed for stereo images like DAVA-Net to identify the best segmentation model based on stereoscopic fundus images with *Pytorch*.

Drone Performance-Aided Design and Control System, *BUPT Algorithm Designer*

Beijing, China

Jun. 2018 – May 2019

- Designed and optimized flight algorithms of drone formation using *MATLAB* to adopt the distributed formation, and implemented the master-slave flight mode as well as the formation convergence with a discrete controller.

Acquisition of GPS Information Using STM32, Tsinghua University

Beijing, China

Independent Researcher

Jul. - Oct. 2018

- Used the HAL library to obtain GPS information on development board STM32L476.

WORK EXPERIENCE

Cardinal Operations

Beijing China

Algorithm Intern

Sep. 2019 - Present

- Pre-processed the commercial data like sales, inventory, and replenishment by data merging, grouping, data traces, date completion and calculation of statistics with *Pandas* and *NumPy*.
- Worked with Algorithm Development Group to customize the replenishment strategy for the enterprise customers (e.g. Xiaomi, Toyota) to make wise purchasing and replenishment decisions.
- Participated in the development of the internal Python API "Coforecast 2.0" with the functions of preprocessing, feature generation, goods classification, forecast and evaluation.

"Python and Financial Computing" Online Research Project (GEC Academy)

Beijing China

Teaching Assistant

Oct. - Dec. 2019

- Held tutorial sessions, solved students' programing problems, gave detailed answers towards questions about finance, completed reference solutions for the assignments, and collected and corrected the homework.

"Deep Learning" Course Preparation and Manuscript Writing (Renmin University of China) Beijing, China Teaching Assistant Mar. 2019 – Aug. 2019

- Helped with course preparation of *CNN* and *Reinforcement Learning*, including literature review, case collection and code design and developed presentations for students and held seminars once every two weeks.

- Co-authored chapters of a new textbook of the project instructor.

PROJECTS

$Hardware\ \&\ Software\ Implementation\ of\ Campus\ Scooter\ Sharing\ System$

Beijing, China

Project Leader

Mar. - Jun. 2019

- Based on the 8051 development board, used LEDs, keypads, buzzers and LCD components to simulate login, borrowing, and returning functions in actual application scenarios.
- Implemented GUI with *Java* to provide users and managers with the functions like login, borrowing and returning a scooter, paying the fine, managing information and so on.

Campus Second-Hand Trading Platform

Beijing, China

Project Leader

Mar. - Jun. 2018

- Developed a website with *HTML*, *CSS*, and *JavaScript* to realize functions such as user registration, log-in, group chat, publication and organization of products, and purchases.

Online Supermarket Management System

Beijing, China

Project Leader

Oct.- Dec. 2016

- Designed the manager-side of the online supermarket management system in *C Language* enabling users to purchase, browse and compare goods and prices, and managers to administrate goods.

EXTRACURRICULAR ACTIVITIES

Coursera Online Course

Sep. 2019 - Present

- Already got the certificates of the courses "Machine Learning" by Stanford University, "Introduction to Data Science in Python" by University of Michigan and "Introduction to Probability and Data (Statistics with R)" by Duke University.
- Now take the course "Introduction to Statistics & Data Analysis in Public Health" by Imperial College London and the remaining courses of "Statistics with R" by Duke University.

Volunteer Activities at BUPT

Beijing, China

Volunteer & Organizer

Sep. 2016 - Present

- Joined 20 volunteer activities, serving 1000+ individuals in total with 409 hours of volunteer work.
- Led 40+ students to plan, organize and participate in 10+ large-scale activities.

HONORS AND SCHOLARSHIPS

"Honorable Mention" in COMAP's Mathematical Contest in Modeling	2018 & 2019
2018-2019 First-Class Scholarship (3%)	2019
2017-2018 Outstanding Student of Beijing (0.5%)	2019
National Scholarship (1%)	2017 & 2018
Excellent Student of BUPT (6%)	2017 & 2019
2017-2018 Excellent Student Cadre of BUPT (3%)	2018

SKILLS

Technical Skills: High level of proficiency in Python, C, Java, SQL and LATEX programming

Foundational skills in **R, MATLAB, HTML** and **Embedded C**Good understanding of **STM32** development board and drone

Language Skills: English (Fluent), Chinese (Native), German (Basic)

TOEFL: 106 (R29 + L29 + S23 + W25) **GRE:** 324 + AW3.5