

Yufan WANG

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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: Advanced Mathematics, Probability Theory & Stochastic Processes, Linear Algebra, Discrete Techniques for Computing, Operations Research, Software Engineering, Data Structures, Database, Operating System, Introduction of Internet of Things, Information Processing Technology on Internet of Things, C Programming, and Java

RESEARCH

Glaucoma Diagnosis Based on 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 (CNN) models (ResNet, VGG, Inception) with Long Short Term Memory, and modified other semantic segmentation models and models designed for stereoscopic images like DAVA-Net to identify the better segmentation model based on stereoscopic fundus images with *Pytorch*.

Drone Performance-Aided Design and Control System, BUPT Beijing, China

Algorithm Designer Jun. 2018 – May 2019

- Designed and optimized flight algorithms of drone formation using *MATLAB* to adopt the distributed formation, realizing 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, renaming, grouping, data traces, date completion and calculation of statistics with *Pandas* and *NumPy*.
- Worked with Algorithm Development Group to customize the optimal replenishment strategy for the enterprise customers (e.g. Xiaomi, Toyota) to make wiser 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. 2019 – Dec. 2019

- Held tutorial session, solved students' programming problems, gave detailed answers towards questions about finance, completed reference solutions for the assignments, 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*, such as basic literature review, case

collection and code design, developed presentation for students and held seminars once every two weeks.

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

PROJECTS

Hardware & Software Implementation of Campus Scooter Sharing System Beijing, China

Project Leader Mar. – Jun. 2019

- Based on the 8051 development board, used LED, keypad, buzzer 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 of products, organization of collections, and purchases.

Online Supermarket Management System Beijing, China

Programmer 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

- Got full marks in all tests and assignments in the courses “Machine Learning” by Stanford University and “Introduction to Data Science in Python” by University of Michigan and already got the certificates.
- Now take the courses “Introduction to Statistics & Data Analysis in Public Health” by Imperial College London and “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 **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