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: Discrete Techniques for Computing, Operations Research, Probability Theory & Stochastic Processes, Advanced Mathematics, Data Structures, Database, Introduction of Internet of Things, Linear Algebra, Information Processing Technology on Internet of Things, Operating System, 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 to obtain optic disc and cup images from stereoscopic fundus images as benchmark and to sift and extract local features.
- Modify other models like basic Convolutional Neural Network (CNN) models (ResNet, VGG, Inception) combined with LSTM and stereo models like DAVA-Net based on stereoscopic fundus images to identify the better segmentation model with Python *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.
- Generated the simulation interfaces by identifying user's input graphics to control the flight of the drone.

Acquisition of GPS Information by Using STM32, *Tsinghua University* Beijing, China
Independent Researcher Jul. – Oct. 2018

- Used the *HAL* library to obtain GPS information and utilized STM32L476 to transfer the data to the port.

PROJECTS

***Project Leader,* Hardware & Software Implementation of Campus Scooter Sharing System**, Beijing, China 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.

***Project Leader*, Student Dormitory Management and Inquiry System**, Beijing, China Nov. – Dec. 2018

- Established a database of student information and dormitory rooms of 10 in *MySQL* and used *SQL* to realize the information query function.
- Conducted *JDBC*, and displayed query results in GUI by *JAVA*.

***Project Leader,* Campus Second-Hand Trading Platform**, Beijing, China 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.

***Developer*, GUI Design for an Evaluating System of Math Course**, Beijing, China May – Jun. 2018

- Implemented GUI with *JAVA* to provide students with the functions of problem setting, error checking and error recording.

***Programmer*, Online Supermarket Management System**, Beijing, China Oct.– Dec. 2016

- Designed the manager-side element of the system in *C Language* enabling users to purchase, browse and compare goods and prices, and administrators to manage goods.

WORK EXPERIENCE

Cardinal Operations Beijing China

Algorithm Intern Sep. 2019 – Present

- Pre-process the commercial data like sales, inventory, and replenishment by data merging, renaming, grouping, data traces, date completion, visualization and calculation of statistics with *Pandas, NumPy* and *Matplotlib*.
- Work with Algorithm Development Group to customize the optimal replenishment strategy for the enterprise customers (e.g. Xiaomi, Toyota) to make more accurate purchasing and replenishment decisions.
- Analyze the previous sales data and generate the forecast sales, then simulate the sales process to optimize the replenishment algorithm.
- Participated in the development of internal Python API "Coforecast 2.0" with the function 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' programing 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.

EXTRACURRICULAR ACTIVITIES

Coursera Online Course Sep. 2019 - Present

- Join in the courses "Machine Learning" by Stanford University and "Introduction to Data Science in Python" by University of Michigan.
- Got full marks in all tests and assignments of both courses and have already got the certificate of "Introduction to Data Science in Python" and "Machine Learning".

Volunteer activities at BUPT Beijing, China

Volunteer 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 execute 10+ large-scale activities.

HONORS AND SCHOLARSHIPS

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