Yang Yufeng

159-2117-2395 | yangyufeng@g.ucla.edu

EDUCATION

Fudan University, Department of Aeronautics and Astronautics *Sep 2016 - Jun 2020*
Maior in Theoretical and Applied Mechanics *Shanghai, China*

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- National Scholarship for 2017 & 2018
- Relevant math course: Higher Algebra, Probability and Statistics, Complex Analysis, Real Analysis, Calculus on manifolds

Fudan University, Department of Computer Science *Sep 2017 - Jun 2020*
Minor in Data Science *Shanghai,China*

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- Relevant Coursework: Machine Learning, Introduction to Database, Data Structure and Algorithm, Data Mining

University of California, Los Angeles (UCLA), Samueli School of Engineering *Sep 2018 - Dec 2018*
Exchange student in Computer Science *Los Angeles, CA*

- Coursework: Introduction to Computer Science, Computer Organization, Web Application, Discrete Mathematics, Statistical Programming with R

PROJECT EXPERIENCE

Single page blog website *Oct 2018 - Nov 2018*

Designed a complete web application which was a blog with markdown editor and user login

- Utilized Node.js framework Express to build the model layer.
- Designed the front-end components and services using the Angular framework.
- Applied MongoDB database, developed and tested the whole application in docker.
- Constructed the login website sending Json Web Token(JWT) as a cookie.
- Using locust to test the server, 450 users 285.5 read requests per second and 98% responded in 180 ms, 100 users 66.9 write requests per second and 98% responded in 77ms.

Robot arm in healthcare *Aug 2018 - Aug 2018*
Technical leader *Imperial College London*

- Responsible of the procedure of every part in this project including BLE (connecting with the client), robot vision and robot control.
- Programmed the module of robot vision using opencv and traditional vision algorithm
- Standardized the api between vision and control
- designed the front-end and UI to make our application more user-friendly by html5 and javascript.

RESEARCH EXPERIENCE

Flower classification and detection *Mar 2018 - Jun 2018*
Research Assistant in School of Data Science, Supervisor: Yanwei Fu *Fudan University*

- Labeled the dataset by open source tool labelImg on github
- Constructed a modified system based on YOLOv3 with residual structure by Pytorch and Keras Framework to classify 5 classes of coarse-grained flowers and detect the location in the images.
- Improved the original best accuracy of this dataset on kaggle from 88% to 90%.

The influence of lane changing to the traffic flow *Jun 2017 - Dec 2017*
Research in department of AA, Supervisor: Mingming Guo *Fudan University*

- Used the micro discrete model of Cellular Automation to simulate the traffic flow by MATLAB
- Applied a simplified N-S equations to describe traffic flow and computed the numerical result by Runge-Kutta algorithm

HONORS

- 2017.10 The National First Prize in The Nineth Chinese Mathematics Competitions
- 2018.03 Mathematical Contest in Modeling(COMAP) Honorable Mention
- 2018.06 The First Prize in Mathematical Modeling Contest of East China Cup
- 2018.11 The Second Prize in Contemporary Undergraduate Mathematical Contest in Modeling

SKILLS & OTHER EXPERIENCE

- **Programming languages:** Proficient: Python; Experienced:C/C++/JAVA/Javascript/MATLAB/R/HTML
- **Platforms & Tools:** Python/Flask, MYSQL/MONGODB, Pytorch/Keras, CSS/Bootstrap, Node.js/Express/Angular
- **Activities:** Fudan 129 Chorus(member), YIDAY Innovation Summit(volunteer), Student Union of the department of AA (vice chairman)