

# Yang Yufeng

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

## EDUCATION

**Fudan University, Department of Aeronautics and Astronautics**

Sep 2016 - Jun 2020

*Major in Theoretical and Applied Mechanics*

Shanghai, China

- Overall GPA: 3.78/4.00 (Core GPA:3.87) Rank 1/45
- 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

- GPA:3.67/4.0 (Rank 12/102)
- 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

**Imperial College London**

Aug 2018 - Aug 2018

*Robotics & Artificial Intelligence Summer School*

London, UK

- Relevant Coursework: Shape and Feature Recognition, Robotic Vision - Applications in Healthcare

## 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 labellmg 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

## PROJECT EXPERIENCE

**Simple blog website (web application)**

Oct 2018 - Nov 2018

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

- Utilized Java-servelet (in Tomcat) to construct the back-end of this application
- Designed the front-end which contained the technique of html5, css(bootstrap), javascript(AJAX) by JAVA Server Page(JSP) and tested it in docker.
- Built this project by MEAN stack(MongoDB, Express, Angular, Node.js) again.
- Constructed the login website sending Json Web Token(JWT) as a cookie.

**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.

## HONORS

- 2017.10 The National First Prize in The Ninth 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:** LINUX, MYSQL/MONGODB, Pytorch/Keras, CSS/Bootstrap, Node.js/Express/Angular, LATEX
- **Activities:** Fudan 129 Chorus(member), YIDAY Innovation Summit(volunteer), Student Union of the department of AA (vice chairman)