Ding Ruiyang | Curriculum Vitae

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Education

- **ShanghaiTech University** — **Shanghai,China**
  Computer Science & Technology, Master of Science in Engineering — *2017–*
- **China University of Petroleum** — **Qingdao,China**
  Automation(Elite Class), Bachelor of Science in Engineering — *2013–2017*

Working Experience

- **UAV-CL Lab, ShanghaiTech University** — **Shanghai, China**
  Research Assistant — *March 2017–*

  Develop an UAV simulation system with UE4 game engine, verify navigation algorithm under this simulator.
  Develop an UAV control system with DJI SDk
  - Develop uniform C++ API interface for api control and data collection with LiDAR, ZED stereo camera,etc.
  - Develop user interface of status display and point cloud visualization with OpenGL.
  - Integrate point registration algorithm, and path-planning algorithm into the system.

Honor

2015 National Undergraduate Electronic Design Contest — **National First Prize**
2015.09, Hangzhou,China — Top 1%

China National Petroleum Corporation Scholarship — **RMB 6000**
2015.11, Qingdao,China — 1/123

Projects

- **ShanghaiTech Teacher-Student Matching System:** *A platform for graduate admission*
  https://github.com/JohnDing1995/Selecting-Master-Program-USA
  - Develop an graduate admission platform with Django framework.
  - Develop an CAPTCHA generation system with JavaScript to prevent malicious registration.
  - Use *auth* module to develop the user system.
  - Use relational database to represent the selection model between teacher and student, use *MySQL* for implementation.
  - Develope and web crawler to sync teacher's information form ShanghaiTech's website and generate teacher's account automatically, with *request* and *BeautifulSoup* module.
  - Use *Deferred Acceptance Algorithm* for matching between teachers and students.
- **Master Application Helper** *An assistant for graduate school selection*
  https://github.com/JohnDing1995/shanghaiTechTSmatching
  - Develope an web crawler with *request* and *asyncio* module to fetch admission case from 1point3acres.com asynchronously.
  - Use *MongoDB* for data storage.
  - Use *threading* and *Queue* to solve the blocking problem between data crawling, parsing and writing.
  - Develope an web app with *Flask* web framework and *Bootstrap* & *JQuery* libraries, which allows users to query crawed admission cases.
  - Use *WSGI*,*Nginx* to deploy the web app on Tencent Cloud.

- **SCATicket** *ShanghaiTech Cinema Seat Reservation System*
  - Use Django to build back-end services, design and implement RESTful API
  - Use Django-Jet to set up the background management system
  - Design a relational data model and implementing it with MySQL
  - Design background for visualized seating selection, user selection, seat selection, seat reservation and other functions
  - Use the Django-mail toolkit to automatically send confirmation emails to the user's on-campus mailbox

Technical and Personal skills

- **Programming Languages:**
  C++, Python, Java, Golang.
- **Tools and FrameWork:**
  Linux, Git, MySQL, MangoDB, Django, Flask, Bootstrap.
- **(Nature)Language Skills:**
  Chinese(Native), English(Proficient, TOEFL 101),Dutch(Beginner).