



# **Zhiyu Yuan**

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#### **EDUCATION AND TRAINING**

### **Master Degree of Engineering**

**Tsinghua University** [ 01/09/2018 - 01/07/2021 ]

Address: Haidian District, Beijing, China Tsinghua University, 100084 Beijing (China)

Website: https://www.tsinghua.edu.cn/en/index.htm

Field(s) of study: School of Software

[transcript] [certificate]

### **Bachelor Degree of Engineering**

**Wuhan University** [ 01/09/2014 - 01/07/2018 ]

Address: Wuhan, Hubei Province, P.R.China. Wuhan University, 430072 Wuhan (China)

Website: <a href="https://en.whu.edu.cn/index.htm">https://en.whu.edu.cn/index.htm</a>

Field(s) of study: Computer Science

**Final grade:** 3.67 (top 5%)

[transcript] [gpa] [certificate]

#### **WORK EXPERIENCE**

#### **Software Engineer**

**Kuaishou Technology** [ 14/07/2021 – 31/01/2023 ]

City: Beijing Country: China

Research on reducing computational resource consumption while maintaining user experience of quality. [paper] (unpublished)

- 1. Propose an algorithm leveraging user heterogeneity to personalized allocate resources (maximize QoE or minimize resource cost).
- 2. Implement the algorithm and develop a system called Hydrus, which serves tens of millions of users in regions such as Brazil and Spain, reducing 6% of average latency and saving 8% of computing resources (~30000 CPU cores).

### **Software Engineer Intern**

**Kuaishou Technology** [ 01/03/2020 - 01/06/2021 ]

**City:** Beijing **Country:** China

Mainly focus on improving the accuracy of short video recommendation models. [paper] [code] (unpublished)

- 1. Propose UDG technology, improving online AUC by 0.4%, engagement metric by 2.0%, which are serving for hundreds of millions of users.
- 2. Transfer meta-learning technology to online model to alleviate user cold-start problem.

### **Data analyst Intern**

**Tencent** [ 01/05/2008 – 01/08/2018 ]

City: Beijing Country: China

- 1. Conducting large-scale processing and analysis of massive data of Tencent Maps.
- 2. Using Scala to rewrite the data processing module written in Java.

### **PROJECTS**

### 2017 TITC National Undergraduate IOT Design Contest - Team Leader

[ 01/05/2017 - 01/09/2017 ]

We developed an intelligent cushion for office workers to protect data privacy and physical health by identifying users and monitoring sitting postures. We won the national first prize and the China Telecom Innovation Award (Top 1%) [paper][video][award]. What I do:

- 1. Implement an algorithm to identify different person using distributed pressure sensors in an acceptable accuracy.
- 2. Develop a desktop software, which aims to identify users, moniter sitting postures, make data visualization and so on.

### DeeCamp 2018 - Member

[01/08/2018 - 23/08/2018]

We achieved pipeline-based autonomous driving in Carla simulator in a month. It includes high-precision map module, object detection and segmentation module, automatic path planning module, and control module. We won the Best Application Award [video][award]. What I do:

- 1. Modify Carla code to add functionality for data collection and visualization of route trajectories.
- 2. Implement the Pure Pursuit algorithm to achieve stable control of the vehicle on a predetermined route.
- 3. Integrate all modules using ROS (Robot Operating System) to enable communication among them and demonstrate the final outcome.

#### **HONOURS AND AWARDS**

## **Excellent graduate of Wuhan University**

Wuhan University [ 01/06/2018 ]

# the Merit Student of Wuhan University

Wuhan University [ 01/09/2015 ]

Awarded for two consecutive years from 2015 to 2016.

# **Excellent Student Scholarships**

Wuhan University [ 01/09/2015 ]

Awarded for three consecutive years from 2015 to 2017.