

# Curriculum Vitae

## PERSONAL INFORMATION Weiran Yang

☎ (+49) 015257449250

✉ [weiran.yang@rwth-aachen.de](mailto:weiran.yang@rwth-aachen.de)

🌐 <https://github.com/ApinePro>

## EDUCATION

2020.10-Present

Master, major in Media Informatics  
RWTH Aachen University

Main courses:

Basic Techniques in Computer Graphics

Automatic Speech Recognition

Introduction to English Linguistics I

Web Science

Machine Learning

Designing Interactive Systems I

2016.9-2020.6

Bachelor of Engineering,  
Major in Computer Science and Technology

Beijing University of Posts and Telecommunications (211 Project and First Class Discipline)

WGPA: 3.3/4

WGPA (**key courses**): 3.51/4

2018.9-2019.2

Exchange Program as Master of Engineering

Major in Embedded Systems

Institut Supérieur d'Électronique de Paris ( ISEP )

Weighted average mark: 16.17/20

## PROJECTS

2018.3-2018.6

A text editor *Miniword* based on QT (team work)

**Tasks:** Using C++, designed a text editor with following functions:

- Display the text and edit text color or style
- Open existing text file, create a new one or save the file
- Move the cursor by the mouse or the keyboard
- Type characters or change line by pressing keys
- Delete input text with backspace or delete key
- Implement text search and replacement
- Implement copy and paste functions
- Select multiple characters and operate on them

**Responsibilities:**

- Leader of the three-person team
- Define the main data structure, modules and the interfaces between modules
- Implement text and line insert, delete, copy, and paste
- Use KMP algorithm to implement text search and replacement
- Write the development document and test the main functions

2019.3-2019.6

**A simple DNS relay server based on UDP and Python (individual work)**

**Task:** Designed a program for DNS Relay Server to receive queries and return replies

**Action:**

- Use Server-Client model to both send and receive UDP packages
- Use a local file as a cache storing DNS entries, and update it regularly
- Use threads to handle several queries simultaneously

2019.3-2019.7

**A simple word-memorizing game with Server-Client model (individual work)**

**Task:** Designed a game for memorizing English words, including the following features:

- Effective to help users with memorizing words
- Mainly store files in locality and communicate with server to update data
- Online battle between users

**Action:**

- Use C++ for object-oriented programming
- Use TCP for communication between Server and Client
- Use threads for the simultaneous running of functions
- Use a local file as an English dictionary for generating questions
- Design UI and mechanism of entertainment for user experience in the game

**LAB AND  
INTERNSHIP**

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**Internship****ZTE Corporation**

5G Wireless Network and IP product operation and maintenance internship

2019.8

Configure the base stations for wireless telecommunication with specific software.  
Built enterprise intranet using particular types of routers and switchers.

**Research Experience**

2018.9-2019.2

**Research and Development in Information Technologies Team (RDI Team),  
Institut Supérieur d'Électronique de Paris**

Research under supervision of Dr. Raja Chiky on Recommendation systems, especially real-time recommendation systems using variational Bayesian methods.

2019.8-2020.5

**Data Science and Service Research Center, Beijing University of Posts and  
Telecommunications, Beijing, China**

Researching on data mining for social network and its recommendation system supervised by Dr. Ting Bai. I use PyTorch to build a natural language processing model.

The aim is to find the inherent relations between the users' psychological characteristics and the behavior of purchasing and making comments in a social network. I extract features from corpus of comments published on Yelp and train a neural network model to evaluate other users' psychological attributes. Then I apply these attributes to help building a more precise recommendation system.

## SKILLS AND HONOURS

TOEFL:

Overall	Reading	Listening	Speaking	Writing
101	30	25	22	24

Honours:

- Third Prize of Scholarship of Beijing University of Posts and Telecommunications
- Third Prize of the National English Competition for College Students

Programming languages:

- C / C++ / Python / Java
- JavaScript / Clojure

Other languages and tools:

- Machine Learning Libraries: PyTorch (More experienced) / Tensorflow
- Operating systems: Linux
- SQL
- HTML / CSS
- Latex /Markdown
- Wiresharks

Other skills related to computer science:

- VHDL / assembly language

Extracurricular activities:

- German (Finished A2 course), French (about A2 level), Japanese (about N4 level)
- Soccer team member of School of Computer Science at BUPT