Xietian Wang

• Timothy.w.s@outlook.com

EDUCATION BACKGROUND

Xidian University (XDU), Xi'an, China — Sept. 2017 - June 2021
School of Telecommunication Engineering (STE)
Major: Information Engineering
Expected Degree: B. E.
Overall GPA: **3.9** / 4.0 Ranking: **1** / 142

ENGLISH PROFICIENCY

TOEFL: 102 (R: 29, L: 28, S: 25, W: 22) — Aug. 25, 2019

ACADEMIC EXPERIENCE

1. **2019 Tsinghua-Peking McGovern CLS CIBR Summer Program for Neuroscience and Cognitive Science** — July 2019
   Organization：Tsinghua-IDG/McGovern Institute for Brain Research, Beijing, China

2. **FIAS Summer School 2018 "Horizons of Industry 4.0 in Germany" focusing on Artificial Intelligence** — July - August，2018
   Organization：Frankfurt Institute for Advanced Studies(FIAS), Frankfurt am Main, Germany

HONORS & AWARDS

1.	National Scholarship 2017-2018 ❁	Nov. 2018
2.	***1st Prize*** in 4th National Academic English Vocabulary Contest for College Students	Jul. 2019
3.	***2nd Prize*** in 2019 National English Competition for College Students (NECCS)	May 2019
4.	***1st Prize*** in Xidian Mathematical Model Competition	May 2019
5.	***1st Prize*** in 30th "Spark Cup" Extracurricular Academic Science Technology Works Competition	Dec. 2018
6.	Xidian Excellent Student	Nov. 2018
7.	***Bronze Prize*** in 4th China College Students' "internet Plus" Innovation and Entrepreneurship Competition (Campus Qualification Trials)	Jul. 2018
8.	***3rd Prize*** in 2018 National English Competition for College Students (NECCS)	May 2018
9.	Xidian Outstanding Student Leaders	May 2018
10.	***1st Prize*** & ***3rd Prize*** in 29th "Spark Cup" Extracurricular Academic Science Technology Works Competition	Dec. 2017

AREAS of EXPERTISE

MATLAB, C, Verilog, Html, Circuit Design, Signal Processing, EEG Data Collecting

RESEARCH EXPERIENCE

1.Study on Cell's Gene Expression Curve in Different Status of Cell Growth, Beijing — Jul. - Aug. 2019
Internship in IDG/McGovern Institute for Brain Research at Tsinghua University
Advisor: Professor Yinqing Li
Role：Project member

- Applied the dimension reduction process to the cell's gene expression matrix acquired by RNA-seq and ATAC, and generated the 3D data points connected with time and status of cell growth
- Use MATLAB to fit the 3D pseudo-time curve of data points' development track, projected the corresponding status of gene expressions into the pseudo-time axis, and observed the change of gene expression

2.EEG Analysis-based Testing and Early Intervention for Autism, Xi'an, China Oct. 2018 - present
--sponsored by National Students' Platform for Innovation and Entrepreneurship
Advisor: Professor Xiao Zeng & Professor Jun Li
Role： Project lead

- Leading 3-person team
- Analyzing the time and frequency domain of the data by using MATLAB on 16-electrode EEG data collecting equipment
- Conducting classification and diagnosing ASD and its level with the method of logistic regression
- Assisting in programming the game used for intervention by using Unity3D

3.The Development of EVIS Online Intelligent Fitness System, Xi'an, China Mar. 2019 - present
Advisor: Professor Yangli Wang & Professor Rui Song
Role： Project lead

- Leading and Organizing 7-person team
- Calculating deviation by referring to the standard posture of fitness coach
- Using MATLAB to evaluate and give the suggestions of posture improvement

INDEPENDENT PROJECT EXPERIENCE

1. User Prediction Based on App Behavioral Data May 2019
Programming language: MATLAB; Software: MATLAB R2016A

- Developed MATLAB programs
- Processed the data cleaning and classification and obtained calculation function by algorithms such as PCA, Logistic Regression, Naive Bayes, and Neural Network
- Calculated confusion matrix, and computed precision, recall ratio, F-score, AUC, KS, etc.
- Implemented the machine learning by finding optimal parameters through mesh searching algorithm, and anticipated the possibility of target users purchasing behavior

2. User Interaction Intelligent Entertainment System Mar. – June 2019
Programming language: Java, Arduino, HTML, CSS; Software: MATLAB R2016A,
Android Studio, Arduino, Sublime Text, Adobe Premiere

- Created Android code and implemented visual interface human-computer interaction platform, including score display, user data maintenance, voice introduction of operation instruction, etc.
- Developed STM32 control code as the central control unit to analysis the Android data and generate the next operation of FPGA
- Designed website using HTML and CSS code, created poster, and recorded the promotional video

3. Design of traction-typed lifting device based on Xilinx FPGA Sept.- Nov. 2018
Programming language: Verilog HDL; Software: Vivado

- Programed Verilog to capture click events and judging the input of the key
- Implemented precise control through detected sensor data and judging the angle of the server motor

4. Return Stroke Device Design by Using C++ and Arduino Jul. - Aug. 2018
Programming language: Arduino; Software: Arduino

- Developed control code of Arduino to receive and process the command
- Drove the baffle to the designated spot by calling the server motor, to intercept the moving balls

5. Intelligent Baggage Steward May – Jul. 2018

Programming language: C; Software: Keil uVision5

- Developed STM32 program
- Located the user by ultrasonic positioning and infrared ray positioning
- Adjusted the speed, direction of the car by generating PWM wave

6. Intelligent Light Intensity Self-Checking Alarm System Nov. 2017

Programming language: C; Software: Keil uVison5

- Used 51 SCM to receive data from photosensitive sensor and judge the light intensity
- Remind the user of eye health in the case of damaging light intensity

7. Temperature Controlled Fan with LED Nov. 2017

Programming language: C; Software: Keil uVision5

- Adjusted the rotate speed of the fan in line with the room temperature through reading data from the temperature sensor
- Implemented temperature and speed display on seven-segment-display LED

INDUSTRIAL INTERNSHIP EXPERIENCE

ANXUN Information Science & Technology Co. Ltd, Hefei, China Aug. 2019

- Assisted in designing and optimizing programs

SOCIAL EXPERIENCES & ACTIVITIES

1.Vice President of College Student Science and Technology Associations Sept. 2017 - present

- Organizing the programing training and serve as the lecturer
- Explaining the usage of equipment of the CSSTA laboratory
- Managing the equipment of the CSSTA laboratory

2.Xidian Student Union，member Sept. 2017 - present

- Organizing literary and artistic activities

3.Xidian Youth Volunteers Association, member Sept. 2017 - present

- Teaching and helping mentally handicapped person weekly

4.Xidian Loving-heart Volunteer Club, member Sept. 2017 – present

- Assisting and Interacting with autistic children face to face weekly

PROFESSIONAL SKILLS

Programming skills: *C, MATLAB, Verilog HDL, Java, Html, CSS, Android, R, Linux bash and Python*

Software tools: *Visual Studio, Devc++, Eclipse, MATLAB 2016A, Jupyter Notebook, Anaconda, Pycharm, Android Studio, Keil uVision5, Proteus, Arduino, Cura, EDFbrowser, sublime text, Vivado, Arduino, AutoCAD, 3ds Max, Au, Pr, Ps, R studio*

Proficiency in Program：MATLAB, C, Verilog HDL

Familiar with：Python, Android

Used Language：R