

# Xiangrui Deng

Austin, Texas, 78705

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(512)228-1770

## EDUCATION

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### The University of Texas at Austin

Aug. 2018 - May. 2020

*Master of Science, Information Science, Focus on Data Analysis* - Overall GPA: 3.75/4.00

Selected Courses: *Database Management, Data Analytics with Python, Intro to Machine Learning, Data Wrangling, Statistical Analysis/Learning, Advanced Visualization Environments, Visualization and Data Analysis*

### The University of Manchester

Jun. 2017

*Bachelor of Engineering, Mechatronics Engineering*

### North China Electric Power University

Jun. 2017

*Bachelor of Engineering, Electrical Engineering and Automation*

## SKILLS

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**Programming:** Python (Scikit-learn, Keras, NLTK, Seaborn), SQL, PHP, MATLAB, C

**Software:** MySQL, SPSS, Tableau, Unity, Sketch, Figma, Illustrator, Photoshop, SolidWorks, LabView, MS Office

## COURSE PROJECTS

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### Interactive User Guide with Hololens (Augmented Reality) – Unity

Oct. 2019 - Dec. 2019

- ◆ Provided a paper guidebook based on the official manufacturer's documentation and used it as a test material.
- ◆ Designed and developed an AR application with the same function on the Microsoft Hololens.
- ◆ Conducted a usability test to evaluate the efficiency and effectiveness of the AR system.

### Person Identification Based on Smartwatch (Data Analysis) - Python, Keras

Jan. 2019 - May. 2019

- ◆ Cleaned raw PPG and ECG data and extracted 20 different features from filtered signals using Python.
- ◆ Built random forest models to identify different people using selected features.
- ◆ Built a LSTM model with Keras to conduct person identification.

### Company Review Analysis (Data Analysis) - Python, Tableau, Scikit-learn

Jan. 2019 - Mar. 2019

- ◆ Developed employees' preference using sentiment analysis and machine learning approaches.
- ◆ Utilized scikit-learn and StatsModels.
- ◆ Visualized the dataset to show the characteristic for different companies with Tableau.

### Job Search Engine Development (Web Development) - Python, Scrappy, Elasticsearch

Sep. 2018 - Nov. 2018

- ◆ Crawl and save data from different resources with Scrappy and BeautifulSoup.
- ◆ Built a basic job search engine with Elasticsearch and completed fuzzy search and search suggestions.

### The Shopping Mall (Web Development) - MySQL, PHP

Oct. 2018 - Nov. 2018

- ◆ Designed data structure and build database about Austin shopping malls in MariaDB.
- ◆ Built a search website to help people find the shopping mall they need in PHP.

### Control Design and Simulation of a Quadcopter (Simulation) - MATLAB, SolidWorks

Sep. 2016 - May. 2017

- ◆ Built the model for the quadcopter in SolidWorks.
- ◆ Simulate the aircraft with different control methods (e.g. PID and LQR) in MATLAB.

## PROFESSIONAL EXPERIENCE

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### Software Engineer Intern - HIT Robot Group, Beijing, China

Jul. 2017 - May. 2018

- ◆ Contributed to design and created wireframes, user flow, and prototypes for the controller's interface
- ◆ Improved product experience of I-Type Tactical Ground Robot.
- ◆ Developed and tested controller's interface by using Qt and ffmpeg.