Mengyu(Bonnie) Chen

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Education

Chongqing University Chongqing, China

M.Eng. in Industrial Engineering (expected) Sep 2019– Present

- Major: Human-computer Interaction
- Selected Courses: User Interface Design, Data Analysis & Mining, Machine Learning, Deep Learning, Mathematical Statistics, Optimization Methods, Graph Theory

ESIEE-Amiens Amiens, France

Exchange Student in Industrial Engineering (Overall **GPA: 4.00/4.00**) Mar 2019– Jun 2019

- The only one qualification in my university based on grades and research performance
- Courses: Directed Research in Industrial Engineering, French

Dalian Jiaotong University (DJTU) Liaoning, China

B.Eng. in Industrial Engineering Sep 2015– Jul 2019

- GPA: 3.7/4.00, Rank: **1/58**
- Selected Courses: Applied Statistics (score: 100/100), Linear Algebra (score: 100/100), Probability & Mathematical Statistics (score: 98/100), Database Principle and Application (score: 97/100), Human Factors Engineering (score: 95/100), Fundament of Industrial Engineering (score: 95/100)

Research Experiences

Human-Computer Interaction Lab，Emory University (remotely) Seattle, USA

Research Assistant to Emily Wall, *Assistant Professor* Oct 2020– Present

Exploring Relationship Between Cognitive Bias and Expertise

- **Big picture:** Replicate Dunning-Kruger (D-K) effect across data-driven decision-making tasks and explore the potential pattern between expertise and decision-making behavior.
- Show D-K effect existing in a data-driven categorization task using a scatterplot visualization in the domains of basketball and dog breeds; Analyze interaction data (e.g., mouse clicks and hovers) to find how expertise impacts decision-making behavior; Provide recommendation for improvement in visual design to mitigate D-K effect.

Industry & System Engineering Lab，ESIEE-Amiens Amiens, France

Research Assistant to Sansen Pascal, *Professor* Mar 2019– Jun 2019

Improving Precision of Coordinate System of Robot End Effector

- **Big picture:** Applied dual quaternion to build the forward kinematics equation to improve robot's motion accuracy with relatively small amount of calculation.
- Applied nicely quaternions to build a kinematics model to obtain the position and attitude of the coordinate system of the robot end effector more accurately and conveniently; Avoided mathematical singularity, gimbal lock situation and complicated calculation of the attitude matrix; Verified feasibility and accuracy of rotation matrix built with quaternions by Denavit–Hartenberg Parameters which is more intuitively to understand.

Selected Awards and Honors

- First-Class Award in China, National College Mechanical Innovation Competition 2018
  Top 1 percent national wide.
- Principal Scholarship, DJTU 2017
  The highest honor in Dalian Jiaotong University. **Only 3** students were awarded among **all** undergraduates based on academic and research performance.
- National Scholarship, China 2016 & 2107
  Top 1 in academic performance in School of Mechanical Engineering in DJTU.
- Silver Award in Liaoning, Youth College Innovation and Entrepreneurship Contest 2016
  Top 5 percent national wide. The youngest team leader.
- The Best Debater and Leader of the Champion Team in the 7th Debate Competition, DJTU 2016

Computer Skills

- Proficient in Android Studio, Processing, Arduino, Adobe Premiere, Matlab, Tableau, SPSS
- Skilled in Python, R, Java, C

Social Activities

- **Head of Public Relation Department**, DJTU Oct 2015 – Jun 2017
  Solicited sponsorship for smooth implementation of school activity. Won the title of Outstanding Student Leader based on my outstanding performance.
- **President of Fischertechnik Club**, DJTU May 2018 – Mar 2019
  Organized new member training. Led team members to win three 1st National Awards and four 1st Provincial Awards in major competitions.