Yutao Jing

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SUMMARY

Mechanical Engineering graduate student with strong analytical mindset background and over 6 years engineering experience in designing, developing electro/mechanical projects, mainly focus on mechanics, control systems, and deep learning.

EDUCATION

Northeastern university, Boston, MA *GPA: 3.78/4.00* *May 2019*

M.S. in Mechanical Engineering, Concentration in Mechanics and Design

Related Coursework:

Math Methods for Mechanical Engineer, Elasticity & Plasticity, Control Systems Engineering, Advanced Control, Finite Element Method, Mechatronic Systems, Aerodynamics, Robotic Sensing and Navigation

Zhejiang University of Technology, Zhejiang, China *May 2016*

B.S. in Logistics Engineering

SKILLS

Operation System:	Windows, Linux, OSX
Programming Language:	Python, C/C++
Design and Analytical Tool:	MS Office, SolidWorks; AutoCAD, ANSYS, MATLAB, Simulink, Maple, Arduino, ROS
Soft Skills and Certificates:	Teamwork, Innovation, Organizing Ability, NVIDIA DEEP LEARNING, Certified SOLIDWORKS Associate (CSWA)

ACADEMIC PROJECTS AND INTERNSHIPS

Neural Network *Spring 2019*

Designed Neural Network in engineering. Used Keras Library, build several Multi-Layer Perceptron (MLP) and convolutional neural net (CNN) architectures to classify the image dataset. Wrote python algorithm on Jupyter Notebook, trained deep learning models on Google Colab and AWS. Also, got a certificate for demonstrating competence of deep learning for computer vision from NVIDIA.

RTK GPS System *Spring 2019*

Wrote a python script of ROS for a Real-time kinematic (RTK) GPS system, data came over both Serial and TCP socket connection, with a base RTK and a rover RTK, the position error reduced into a very small region.

Airfoil in ANSYS *Spring 2019*

Designed and plot an Airfoil using MATLAB and Excel, Computational fluid dynamics (CFD) using ANSYS FLUENT, measured aerodynamic coefficients of the self-design airfoil.

Two-Wheel Self-Balance Car *Fall 2018*

Designed control systems for self-balanced car. Build up a 3D model of two-wheel self-balance car in SolidWorks, and simulated in Simulink and MATLAB, adopted several strategies to balance the car such as PID, state feedback, and Optimal and Robust control.

Hyperloop@NEU *Spring 2018*

Joined the Tesla Hyperloop team to design a model of cutting-edge commuter transport, which can move atop a cushion of air in order to gain a larger velocity. Worked in suspension and levitation section, build up a 3D model in Solidworks and analyzed its properties with FEA (Finite Element Analysis).

Pawor Hydraulic Press Corporation Ltd (Zhejiang, China) *Summer 2018*

- Brainstormed engineering solution alongside engineers.
- ANSYS simulation software. Performed Finite Element Analysis(FEA) for sample inflatable tubes.
- Experienced the product design cycle: conceptualize, design, assemble, and test electro/mechanical prototype.