

Xunbi Ji

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Education Background

M.S.E. in Mechanical Engineering	08.2018-04.2020
University of Michigan, Ann Arbor, Michigan	GPA: 4.00
B.E. in Energy and Power Engineering	08.2014-07.2018
Southeast University, Nanjing, China	GPA: 3.80/4.00 (Rank: 4/135)
Exchange Program: University of Ulm, Ulm, Germany	09.2017-07.2018

Courses Taken

Model Dynamic System, Dynamics and Control of Connected Vehicles, Design Optimization, Linear System Theory, Linear Feedback Control, Principle of Automatic Control

Project Experience

Summer Project, University of Michigan, Ann Arbor 06.2019-09.2019

Application of Neural Networks in Car-following Scenarios

Explored the simplest neural network model in car-following case which can capture the behavior of autonomous vehicle and the delay. Developed an algorithm of delay searching while training the network. Trained the network based on both simulation data and experimental data.

Multidisciplinary Design Program, University of Michigan, Ann Arbor 01.2019-12.2019

Detroit Manufacturing System Quality Improvement

Analyzed the data and did experiments to find the root cause of quality issues and solve the problems.

Independent Graduation Project, Southeast University, Nanjing, China 03.2018-06.2018

Online Calculation Method and Software Implementation of Steam Turbine Heat Rate

Implemented a common model that provides and validates online performance calculations. The data of real-time measurement and online analysis of the unit were managed by Redis database. Used Tornado to realize web integration services.

Internship Experience

Bosch, IT department, Nanjing, China 06.2017-08.2017

- Made presentation templates with the software of Active Cockpit and dashboard, recorded the problems encountered while testing the software and gave feedback to the supplier.
- Participated in industry 4.0 program, coordinated the combination of each department with industry 4.0, assisted to conduct regular meeting and made preliminary training of the usage of the software.
- Processed production data, and solved the problem of ID correspondence between the assembled products and the parts in production line information system.

Skills

MATLAB, Python, Simulink, C++, Mathematica, Excel (data processing)

Scholarship & Awards

Merit Undergraduate Exchange Program, China Scholarship Council	06.2017
National Scholarship, The Ministry of Education of the PRC	10.2016

Extra-Curricular Activities

Member of Chinese Orchestra, Southeast University	09.2014-06.2017
Announcer of Broadcasting Station, Southeast University	09.2014-06.2016