张 雷 (1990-06)

研究方向： **机械故障诊断与振动噪声测控技术(人工智能故障诊断)**

硕士论文课题： 基于粒子群算法的神经网络故障诊断方法研究

（86-0）**150-5717-4540** **zhangleisuda@foxmail.com**

简历陈述

本人期待将学有所成、配合不同的项目与实习及工作经验，并个人的殷勤发奋带进公司，与贵公司的发展共进。

教育背景

2012.9~2016.6 **华南理工大学 • 硕士(学术) • 车辆工程**

2008.9~2012.7 **苏州大学 • 本科 • 机械工程及自动化**

获奖情况

研究生 连续两年获得校一等奖学金，一次二等奖学金

本 科 曾获国家励志、校级一等、自强专项、黄乾亨奖学金，获得军训优秀学员、三好学生、优秀团员、优秀毕业生等荣誉

工作&项目

2016.07 至今 **万向集团技术中心** **杭州** **性能检测工程师**

- 完成汽车零部件产品的相关性能检测工作，如等速驱动轴的扭转疲劳试验、静扭和准静扭试验；底盘零部件的耐久性试验；汽车轮毂轴承单元的泥浆喷射、疲劳耐久、旋转弯曲共振、微动磨损、Hub 弯曲疲劳等试验。
- 参与**通用试验能力建设创新项目**，翻译通用轮毂单元微动磨损、泥水喷溅、低温水浸入、滚道疲劳耐久试验标准，并制定对应的公司企业标准；参与微动磨损试验机和低温水浸入试验机的安装调试；参与**传动轴 NVH 能力建设创新**项目，翻译模态分析文档，参与检测设备引进工作。

2014.08-2014.09 **广汽研究院 1.5T/1.8T 发动机曲轴扭振测试** **广州** **项目成员**

- 参与制定测试方案，采购旋转编码器，进行现场测试分析
- 进行测试数据的阶次分析，通过阶次跟踪方法为发动机匹配相应的皮带轮

2013.08-2014.05 **上海红湖排气系统有限公司** **上海** **研发工程师(实习)**

- 查阅 SAE 论文与报告百篇以上，撰写公司排气系统振动控制分析总体框架，并建立排气系统振动模态测试流程，并参加西门子公司 LMS 疲劳仿真培训
- 完成某款 SUV 排气系统振动模态测试与仿真分析，并参与排气系统声学测试
- 运用 LMS Virtual. Lab 负责完成美国 GE 公司某火车消声器的振动疲劳仿真分析

2012.04-2012.05 **伊顿电气有限公司** **苏州** **R&D 实习生**

- 运用 Inventor 将电气开关器件 3D 图转化为三视图
- 组装 500 多个电气开关器件，测试 200 多个电气器件的开关电压与疲劳寿命，并制作统计表格

2010.06-2012.05 **苏州大学大学生创新性实验计划项目** **项目成员**

项目名称 基于 NI Compact RIO 的电机运动控制系统的设计

- 搭建基于 NI Compact RIO 的电机运动控制系统, 焊接电路板，连接直流电机与 NI 硬件
- 运用 Lab VIEW 编写直流电机的运动控制程序，并进行调试，完成对电机的运动控制

校园经历

2009.05-2011.03 班级学习委员: 负责课程实验的安排与准备以及协助班长组织班级活动

2009.05, 2010.05 院运动会男子 400 米赛跑与男子 4x100 米接力赛亚军

2011.08-2012.03 苏州大学图书馆志愿者：负责图书借还手续，图书分类与上架管理

2012.09-2013.06 华工“红色的涌动”志愿者：拜访慧灵社区，服务智障儿童

技 能

外 语 英语 CET-6, 可日常交流, 流畅阅读

I T 江苏省计算机二级证书**(VB)** **MATLAB** & Python CATIA

LMS Virtual. Lab Hypermesh MS Office

测 试 掌握 LMS TEST.LAB/SCADA 与 BBM-PAK 测试系统

爱 好 阅读和写作（博客），跑步、篮球和骑行，绘画和编程(@Github)

Lei Zhang

Tel: (+86-0)-**150-5717-4540** E-mail: **zhangleisuda@foxmail.com**

Research direction: **Artificial Intelligence Mechanical Fault Diagnosis**

Master thesis: **Study on Particle Swarm Optimization-based Neural Network for Fault Diagnosis**

EDUCATION

Soochow University	2008-2012	Mechanical Engineering	Bachelor	4/72
South China University of Technology	2012-2016	Vehicle Engineering	Master	9/29

HONORS AND AWARDS

Undergraduate	National Encouragement Scholarship	Qianhen-Huang Scholarship	Individual Scholarship
	The 1st , 2nd and 3rd Prize Scholarship	Excellent Military Trainee	Outstanding Graduate
	Excellent League Member	Merit Student	
Graduate	The First Prize Scholarship		

INTERNSHIP & PROJECT EXPERIENCE

Jul.2016-Now **Test Engineer** **Wangxiang Qianchao Co., Ltd Technical Center**

- ✧ Completed **the performance testing of automotive products**, such as torsional fatigue test, static and quasi-static test of constant velocity driving shaft; durability test of chassis parts; mud/salt water splash test, fretting wear test, fatigue and durability test, rotating fatigue strength test and hub bending fatigue test for wheel bearing etc.
- ✧ Participating in **General Motors test capacity building innovation project**, translated GM standards such as GMW14878-2001, GMW16306-2013, GMW16310-2015, GMW16311-2015, drafted the corresponding enterprise standards and participated in the installation and debugging of the new test machines; Partaking of **drive shaft NVH capacity building innovation project**, translated some modal analysis documents and participated in testing equipment introduction work.

Aug.2014-Sep.2012 **Torsional Vibration Test of 1.5T Vehicle Engine Crankshaft in GAC Engineering** **Member**

- ✧ Made the test scheme, purchased the encoder and tested on site
- ✧ Analyzed the data order and installed the engine with right belt pulleys based on order tracking results

Aug.2013-Mar.2014 **R&D intern** **Shanghai Honghu Exhaust System Co., Ltd.**

- ✧ Read more than 100 SAE technical papers and reports, composed the framework for vibration control of exhaust system and established the exhaust system modeling process and modal testing process
- ✧ Accomplished CAE modal analysis, vibration modal test and acoustic test of the exhaust system
- ✧ CAE: Accomplished the simulation analysis of vibration fatigue of the muffler for American GE company

Apr.2012-May.2012 **R&D intern** **Eaton Electric (Suzhou) Co., Ltd.**

- ✧ Transformed the 3D drawings to the 2D three view drawings of the electrical switching devices by Inventor
- ✧ Accomplished the assembly and performance test of the electrical switching devices (more than 200)

Jun.2010-May.2012 **Member** **Students Innovative Experimental Projects of Soochow University**

Project Name: **The Motion Control Design of the Motor Based on NI Compact RIO**

- ✧ Established the motion control system of the motor based on NI Compact RIO
- ✧ Accomplished the program of motion control for the DC motor using Lab VIEW and the debugging

SKILLS

- ✧ Mastery of MATLAB and Python Programming, grasping LABVIEW, CATIA, LMS Visual.Lab
- ✧ **Testing:** Grasping LMS Test. Lab/SCADA and Mueller-BBM Test devices
- ✧ **IT:** Second-level Certificate for Computer (Jiangsu VB) Familiar with MS Office
- ✧ Languages: English **CET 6**, Ability to read English materials