Han Zhang

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OBJECTIVE: To obtain a full-time position in software development.

EDUCATION:

Southern Methodist University (3.73/4)	**Sept.2016 – May 2018**
Bobby B. Lyle School of Engineering, M.S. in Computer Science	**Dallas, TX, the U.S.**
Soochow University M.S. in E.E.	**2011 – 2014, China**
Xi'an University of Posts and Telecommunications (XUPT)	**2007-2011, China**

SKILLS: Python, JavaScript, HTML, CSS, TensorFlow, jQuery, Bootstrap, Jupyter, Git, UX Design, Verilog HDL, Altium Designer 10, NIOS IDE, Quartus II,

EXPERIENCE:

Southern Methodist University, Dallas   **2016 - Present**

- ***Wireless Sensor Network Project (JavaScript, HTML, CSS)***
  Implement the Smallest-Last Ordering algorithm for graph coloring in a random geometric Graph (RGG). These results model and visualize the process of setting up a wireless sensor network(WSN) and selection of bipartite subgraph serving as a communication backbone in a single web page. (Give it a try on my personal website)

- ***Machine Learning in Python***
  - Data analysis (scikit-learn, numpy, pandas, jupyter)
  - Classification (LR, ANN, SVM, CNN, RNN)
  - Visualization using matplotlib, seaborn, and plotly
  - Feature dimension reduction and feature manipulation
  - Common features for text and image processing
  - Gradient-based optimization techniques

  (The rendered Jupyter Notebooks can be found on my personal website. It is being updating.)

- ***Neural Network based Analysis of Customer Behavior on E-commerce Website (Python, TensorFlow)***

  Built a three-layer neural network model to predict customer behavior (bounce or check out).

- ***Interactive Product Design - "Streams"***

  Plan and design the user experience and interface of interactive mobile application on Proto.io. Go through the whole process of interactive product design to finally output a high-fidelity prototype.

Electronics Assembly Technologist   2015 – 2016

Shanghai Aerospace Equipment Manufacturer, Shanghai, China

- Created technical documents of electronic assembly for production of electronic modules of launch vehicles
- Supervised and coordinated the whole production process, including equipment, materials, operators, environmental experiments and inspection.

Hardware Design Intern   Mar.2013 – Mar. 2014

Ultrasonic Physics and Exploration Laboratory, Institute of Acoustics, Chinese Academy of Sciences

Participated in the National Science and Technology Major Project, Technique of MEMS Accelerometer Volume Production and Geophone -- Accelerometer Servo ASIC Development

- Designed and implemented an automatic parameters extraction system for accelerometer gravity field calibration
- Created test system for a 10-bit DAC chip and a switch capacitor chip respectively
- Developed an off-chip reference voltage noise reduction circuit for the accelerometer servo ASIC to locate the accelerometer noise source.

ACTIVITIES:

2017 Mustang Heroes, Extended Service Community   2016 Stampede of Service at Dallas Afterschool, Dallas

Interpreter, 22nd International Bicycle and Motor Fair, Shanghai, China

Student Assistant, Department of International Cooperation and Exchanges of XUPT, 2014

PUBLICATION:

MEMS Analog Feedback Acceleration Sensor and its Testing, Vol.32, No.4 Pt.2 Aug., 2013, Technical Acoustics

PATENTS:	**AWARDS:**
A Serial Bus Communication Bridge, Soochow University	Excellent Graduate (Soochow University)
Patent Number: 201420121985.9	Business English Certificate, Vantage