Ruofan Zhang

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EDUCATION

Tsinghua University, China

09/2012 - 01/2015 (anticipated)

Master of Engineering Mechanical Design

Rhode Island School of Design, USA

06/2014 - 08/2014

Summer Studies

Identity Design & Branding | Web Design

University of Tokyo, Japan

01/2013 - 03/2013

Visiting Student

Micro Components & Systems for Nano / Molecular Engineering

Tsinghua University, China

09/2008 - 07/2012

Bachelor of Engineering

Measurement, Control Technology and Instruments

SKILLS

Design Methods

Think Aloud Requirement Analysis Function Decomposition Concept Prototyping Competitive Analytics Heuristic

Design Tools

Illustrator InDesign Photoshop Dreamweaver AutoCAD Solidworks ANSYS MAXWELL HFSS

Programming

C MATLAB HTML/CSS JQuery/JavaScript

RESEARCH EXPERIENCE

Web Design

07/2014 - 08/2014

Participator | Rhode Island School of Design

- Gained knowledge in prototyping websites and cutting-edge design concepts
- Designed and hand-coded individual static portfolio website

Identity Design & Branding

06/2014-07/2014

Participator | Rhode Island School of Design

- Designed an identity system for an imaginary yogurt company
- Researched into visual language and created a mood board and color palette
- Adapted identity design to various contexts (logo, stationery set, story board and webpage)
- Created an identity manual

Grad Design Seminar II for IxD

02/2014

Auditor | Carnegie Mellon University

- Discussed the current situation and development of co-design
- Simulated co-design process of a museum app

Magnetron Sputtering System Modeling, Simulation and Optimization

08/2013-12/2014

Participator | Tsinghua University

- Modeled of direct current magnetron sputtering system
- Simulated the magnetic field distribution in coil-combination situations
- Optimized the motion law of magnetron

Multidisciplinary Modeling, Simulation and Optimization of Intergrated Circuit Equipment

03/2013-12/2014

Participator | Tsinghua University

- Developed electromagnetic field simulation package of plasma enhanced chemical deposition (PECVD) based on secondary development of HFSS
- Simulated the electromagnetic distribution of PECVD chamber
- Designed and programmed electromagnetic simulation interface

PAPERS & PATENTS

Dissertation

 A Research of Magnetron Sputtering System Simulation and Magnetron Field Parameter Optimization

Patents

 An Eccentric Rotating Magnetron Sputtering System Method of Quasi Laymen

No. 2013105751318 Date: 11/2013

 A Calculation Method of the Optimal Motion Law of Magnetron in Rotating System No. 2013101536990 Date: 04/2013

Software Copyright

• Ansoft Encapsulation System
No. 2014SR051361
Date: 04/2014

HONORS & AWARDS

 Third-class Social Work Scholarship
 Tsinghua University

Tsinghua University 2011

 Outstanding Representative of Social Work
 Tsinghua University 2011

 Outstanding Member in Students' Union the Department of Precision Instrument, Tsinghua University
 2010

INTERESTS

Reading Sketching Running Dramas & Musicals

LANGUAGES

English (fluent) Chinese (native) Japanese (basic)

RESEARCH EXPERIENCE (CONTINUED)

Micro Needle Fabrication Using Electrical Discharge Machining

Participator | the University of Tokyo

- · Analyzed the parametric space of discharge machining
- Processed the ladder-type probe

Rotatable Chair Design

06/2011-07/2011

01/2013-03/2013

Team Leader | Tsinghua University

- Designed the prototype with both 2D sketch and 3D model
- Analyzed the capability and usability of components
- Simulated the assembly process

Shopping Robot Design, Manufacture and Assembly

02/2011-06/2011

Team Leader | Tsinghua University

- Designed, manufactured and assembled the arm subsystem of the robot
- Integrated the design results of all the team members and finished the final report and project presentation

The Circuit Design of One-Minute-Bounce Counter 07/2010-08/2010

Member | Tsinghua University

- Designed the modular circuit
- Used capacitance resistance components to set up the circuit and conducted function debugging

Metalworking Practice

08/2009-09/2009

Member | Tsinghua University

• Learned to operate the machine tools, such as lathes, milling machines, planers, the grinding machines

SOCIAL AND EXTRACURRICULAR ACTIVITIES

Post-disaster Reconstruction in Sichuan Province

04/2011

Campus Media Representative of Tsinghua University

- Spot-visited the 5/12 Wenchuan Earthquake stricken areas and interviewed local government officials and residents
- Improved interpersonal communication skills, coordinative capacity as well as adaptability
- Published reports on China Youth Daily

Future Global Leaders Program

08/2010

Participator | University of California, San Diego

- Discussed with professors and students of UCSD about the current political and economic affairs
- Gained experience in communicating with people of different cultral background

Zijing Newspaper

03/2009-06/2012

Journalist, Layout Designer, Deputy Editor | Tsinghua University

- Learned basic concepts of layout design
- Led the edit of the character page
- Managed the organization, prototype and design of the special edition of centennial celebration of Tsinghua University
- Improved communication skills through interviews