XIAO GE

EDUCATION

JAN., 2016 – PRESENT **Stanford University**, Stanford, CA, US
PhD in *Design Research, Mechanical Engineering*

SEP., 2010 – APR., 2012 **Stanford University**, Stanford, CA, US
M.S. in *Mechanical Engineering*

SEP., 2006 – JUL., 2010 **Harbin Institute of Technology (HIT)**, Harbin, China
B.Eng. in *Spacecraft Design and Engineering, School of Astronautics*

WORK EXPERIENCE

OCT., 2014 - PRESENT **Entrepreneur, researcher**, *Originators*, Beijing, China

+ Since early 2013, served as a sounding board for two educators (later my teammates) and a corporate advisor for their graduate students, seeking educational reform for Chinese children; supported to build up a hands-on creative learning environment for Chinese children
+ Officially joined the team in Oct 2014 to launch Originators as not only a kids-maker space, but also a research entity dedicated to foster children's creativity; mainly engaged in designing programs and courses to "imagine, make, empathize" and the long-term research

APR., 2012 – APR, 2014 **Innovation Specialist**, *Integrated and Disruptive Innovation Center, Siemens Corporate Technology China*, Beijing, China

+ Developed, launched and ran systematic innovation programs of i.DT (Industrial Design Thinking) and its facilities, based on Siemens industrial business environment and cultures of China
+ Trained and coached Siemens R&D managers and researchers with i.DT by participating in 12+ R&D projects across various fields, incl. healthcare, energy, manufacturing, infrastructure & cities:
  - Accurate and affordable urine analysis for small hospitals
  - Interactive building responding to user needs
  - Personalized brain stroke care with augmented decision-making system
  - Enhanced mine security with wireless lifesaver
  - Intelligent traffic management with human as smart sensors
  - Effective operation and maintenance of airport baggage handling by social networking
  - Boost of innovation with Intellectual Property counseling services
  - Design of natural while appetizing lighting in fashion shops
  - Simple and safe gasification system

- Market research of the future of gas turbine in China
- Distributed smart motor system for small and median enterprises

+ Built and maintained an i.DT innovation community serving innovation-inspiring activities in Siemens
+ Researched on Disruptive Innovation and Design-based Learning, paper published; Collaborated with IDEO, Prof. Larry Leifer at Stanford Center for Design Research on coaching and research

APR., 2011 – JAN., 2012 **Data Specialist,** *LOCKSS Program based at Stanford University Libraries*, Stanford, CA, US

+ Worked part-time in LOCKSS to systematically process content testing – ingesting, preserving and managing contents from target publisher websites - for digital preservation of web-published contents
+ Key tech skills applied were Java and Linux

DEPTH EXPERIENCE

APR., 2012 – PRESENT **Coach, Guest Lecturer,** *Teach Human-centered innovation and Design Thinking,* China

+ *University of Science and Technology of China* (Contact: Prof. Weiping Li): previous project of Smart Building; ongoing project of multi-screen, multi-device collaboration
+ *Beijing University of Technology* (Contact: Prof. Wei Liao): ongoing project of children education
+ *Communication University of China* (Contact: Linlin Shui): ongoing coaching
+ *Joint program of Communication University of China, China Film Academy, and China Normal University:* guest-lectured on "Needfinding - Synthesis"

JAN., 2012 – MAR., 2012 **Designer**, *Design Convenient Healthy Eating for New Moms*, Stanford, CA, US

+ Worked in a team to create happy and healthy eating experiences for new moms; generated unexpected insights and sketched ideas that impressed Chick-fil-A managers. This project was based on ME277 Graduate Design Research Techniques class

JAN., 2012 – MAR., 2012 **Researcher**, "*When will 23andme Become a Dating Service?*", Stanford, CA, US

+ Worked in a team to draw insights for the future of Quantified Self movement specifically by studying whether personal genetics (e.g. 23andme as a personal genomics company) could ever drive dating compatibility by applying forecasting tools. This project was based on ME297 Forecasting for Innovators class

OCT., 2011 – DEC., 2011 **Designer**, *Design Interactive Disco Tubes Game*, Stanford, CA, US

+ Co-designed a dynamic and interactive game of lights and colors – Disco Tubes: to win the game, users move and flip the color-lighting cubes among different pillars to match the color pattern on display panel before pillars rise to the top. This project was based on ME218A Smart Product Design class

JUL., 2011 – SEP., 2011 **Researcher**, *Explore Joystick-based Haptic Steering System*, Stanford, CA, US

+ Co-designed a joystick-based haptic steering system for steer-by-wire automobile; Built and tested user interface with the haptics interactive simulation software (CHAI3D) and hardware (Novint Falcon). The project was supervised by Prof. George Toye and sponsored by Panasonic

MAR., 2011 – JUL., 2011 **Researcher**, *Teach ASIMO American Sign Language*, Stanford, CA, US

+ Co-researched on assistive robotics, generating hand gestures of ASL (American Sign Language) for ASIMO - a humanoid robot, using voice recognition for input and a real-time robot simulator for testing and demo; Summer research project: Improved the robot simulator's user interface with Qt software. The project was based on CS327A Advanced Robotics class

OCT., 2010 – JUN., 2011 **Designer**, *Design Configure-to-order (CTO) Communication Satellite Bus*, Stanford, CA, US

+ Co-designed the CTO communication satellite core structure which satisfied unmet needs of testing engineers and dramatically improved satellite production process, collaborated with Universidad Nacional Autonoma de Mexico
+ The project was based on ME310ABC Design Innovation (Engineering Design Thinking) class and sponsored by Lockheed Martin
+ The core idea of the project outcome is in implementation at Lockheed Martin

DEC., 2009 – JUL., 2010 **Researcher,** *Thesis on Satellite Deorbiting by Electrodynamic Tether*, HIT, China

+ Researched on dynamic and electronic performance of Electrodynamic Tether in satellite's deorbiting system for debris removal, with Matlab/Simulink simulation

JUL., 2009 – OCT., 2009 **Research Intern,** *Research Thermal Performance of Open Refrigerator*, Universidade da Beira Interior (UBI), Portugal

+ Researched with UBI professors on the thermal performance of open refrigerated display cabinet, with CFD (computational fluid dynamics) model simulation; paper published

APR., 2009 – MAY., 2009 **Designer,** *Design Auto-welding Systems for Various Welding Seams*, HIT, China

+ Co-designed a welding System, in which a gantry structure was applied to automatically track the random seam, under supervision of Prof. Guangcheng Ma within the course: Element & Circuit of Automatic Control System

BREADTH EXPERIENECE

Volunteer

+ Active in establishing and contributing to diverse networks. Mainly volunteered in - Beijing Design Week 2012; IROS (International Conference on Intelligent Robotics and Systems) 2011; Designing Women activities organized by Society of Women Engineers Association at Stanford 2010 – 2012

Member of Beijing Makerspace

Alumna of IAESTE

+ Joined as trainee and became supportive member of IAESTE (The International Association for the Exchange of Students for Technical Experience) since the internship of 2009 in Universidade da Beira Interior, Portugal

SEP., 2006 – DEC, 2007 **Editor,** Radio HIT**,** HIT, China

+ Planned, managed, and produced radio programs for university news, music, sports news, etc.; Awarded the title "*Most talented editor"* from HIT in 2007

Technical Skills

+ C, Linux, Matlab, AutoCAD, Solidworks, Protel, Gambit, Fluent, Qt, R, Html, Adobe Illustrator, CorelDRAW

Other interests

+ Sketching, Sewing, Woodworking, Jogging, Reading, Martial Arts, and Playing with my dog Bonny

LANGUAGE

+ Mandarin (Native)
+ English (Fluent)

AWARDS

2012 + "Excellent Volunteer" Award by Beijing Design Week

2011 + Panasonic Research Grant at Stanford, project title "PanaEVE - Explore Joystick-based Haptic Steering System"

2010 + Lockheed Martin Research Grant at Stanford, project title "Design Configure-to-order Communication Satellite Bus"

2007 + "Most Talented Editor" Award at Harbin Institute of Technology (HIT) for contribution to Radio HIT

2006 – 2007 + The People's Fellowship for Top One in Harbin Institute of Technology

2001 – 2003 + Scholarship for Top Three in Secondary School

PUBLICATIONS

+ Ge, X., Maisch, B. (invited book chapter, under review) Industrial Design Thinking at Siemens Corporate Technology, China, in: *Design Thinking: A Multidimensional View*, Brenner, W., & Uebernickel, F., eds., Springer.
+ Ge, X., Maisch, B. and Tan, F. (2013, Dec). 极端需求主导 非同寻常创新 (Extreme needs-driven not-me-too innovation). *Tsinghua Business Review*, 6:70-79
+ Maisch, B., Bandyopadhyay, G., Ge, X., Hsu, A. (2013, Dec.) User-driven Innovation for Industrial Environment in China: Opportunities and Challenges. In *6th ISPIM Innovation Symposium*, Melbourne, Australia. International Society for Professional Innovation Management.

+ Ge, X. (2010). Satellite De-orbiting for Debris Removal by Electrodynamic Tether, *Bachelor's Thesis*. Harbin Institute of Technology, China
+ Gaspar, P. D., Gonçalves, L. C. C. & Ge, X. (2010, Jan.). Influence of ambient air velocity orientation in thermal behaviour of open refrigerated display cabinets. In *ASME 2010 10th Biennial Conference on Engineering Systems Design and Analysis* (pp. 453-462). American Society of Mechanical Engineers.