Gao, Edward Xiang 200 W Grand Ave Apt E Alhambra, CA 91801 Home #: (626) 289-8913 Cell #: (626) 500-5613 E-mail: <u>GaoXiang000@ucla.edu</u>

OBJECTIVE:

To further pursuit knowledge in the engineering discipline To understand current practices in the field of design and manufacturing To develop possible future prospects for engineering

EDUCATION:

University of California, Los Angeles (Henry Samueli School of Engineering and Applied Science) Los Angeles, CA 90024 B.S. Mechanical Engineering, June 2011 Cumulative GPA: 3.422 Currently Enrolled as a Ph.D. Student in Mechanical Engineering

TECHNICAL SKILLS:

- Multidimensional Calculus and Physics Models
- Stress and Strain Analysis of Materials
- Statics and Advance Strength of Materials
- Control Systems, Laplace and Fourier Transforms
- Linear Dynamic System, Observability and Controllability of systems
- Complex Geometric Tool Path
- Robotics and 6-DOF Manipulator Control
- Experienced with C++
- Experienced with CAD including Autodesk Inventor and Solidwork
- Experienced with Mat lab and Mathematical Modeling
- Experienced with COMSOL Multi-physics Modeling
- Experienced with MS Word & PowerPoint
- Experienced with Water-jet Machines
- Experienced with RFID technology
- Extrusion Machinery
- Manufacturing/Production
- Quality Inspection
- Troubleshooting/Repair Machinery
- Teaching and Tutoring

FOREIGN LANGUAGES:

- Fluent in Mandarin Chinese
- Fluent in Shanghai Dialogue (Chinese)
- Proficient in Elementary Japanese

WORK EXPERIENCE:

Advance California Innovative Institute – Alhambra, CA	June – Sep 2008
	June – Sep 2007
	June 2012 – Sep 2013
- 1041 S Garfield Ave # 101, Alhambra, CA, (626) 300-8352	
• Teaching high school level calculus and chemistry	
Amtec Human Capital – Rainbird	Jan – March 2012
- 413 South Motor Avenue Azusa, CA 91702	
• Quality Inspector for Pipe and Hose Manufacturing	
Miura Boiler America – Los Angeles, CA	March – June 2012
- 1945 Myrtle Ave, Monrovia, 91016	
Industrial Boiler Inspection	
Industrial Boiler Troubleshooting/Repair	

ENGINEERING PROJECTS:

The Electric Bicycle Project

Personal Title: Cognizant Engineer

- Three people machining project where we adding an electric motor onto an everyday bicycle in order to make it an automatic bicycle. We were able to achieve this with a mere budget of \$200.

The Ultimate Flying Object Project

Personal Title: System Engineer

- This was a four people design project where we made a detail design analysis of a flying automobile using propellers mounted on the side and rear of the vehicle powered by five Wankel Rotary Engines.

Helium Tungsten Bubble Formation

Personal Title: Graduate Researcher

- Plasma bombardment onto Tungsten plate causing helium and vacancy bubbles as well as self-interstitial and substitutionals in bulk and surface evolution. Detailed analysis will be done in each of the four types of reactions, and finally an intertwined cascade on the entire system.

ORGANIZATION:

- NSHSS (Nation Society of High School Scholars)
- ASME (American Society of Mechanical Engineers)

REFERENCES:

References available upon request.

July 2013 – Present

Jan – March 2011

Sep – Dec 2010

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June 2007 – Present March 2010 – Present