

# Ye YUAN

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## SUMMARY

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➤ **To obtain a full time position as Mechanical Engineer. Available from May 2016**

Strong skills in 3-D modeling, FEA, GD&T, actuator/sensor design, control system design, electro-mechanical integration. Proficient in metal, carbon fibre and plastic product design, material selection, DfM, DfA and hands-on model-shop experience. Experience with statistical tolerance analysis and solid background in mathematical and physical principles

## EDUCATION

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Master of Engineering, Mechanical Engineering (Product Design) **3.8/4.0 University of California, Berkeley, CA** Expected, May 2016

Bachelor of Engineering, Mechanical Engineering **3.85/4.0 Peking University, Beijing, China** July 2015

Bachelor of Arts, Economics (dual degree) **3.70/4.0 Peking University, Beijing, China** July 2015

## EXPERIENCE

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**Design Specialist**, *Design of Mini-actuator in Cell Phone*, ITRI & UC Berkeley, CA Sep 2015 – Present

- Designing a new fast-response, long-lasting and cost-effective 5-axis OIS (Optical Image Stabilization) system in CCM (compact camera module) that reduce 15% in volume of current design in commercial smart cell phones
- Managing the project to reach higher manufacturability and reliability, including detail design in FEA, CAD in Solidworks and magnet performance evaluation in VCM (voice coil motor); and selection of commercial components as well as procurement
- Building prototypes including 13M CMOS image sensor, auto-focus module and OIS module

**Mechanical Engineer**, *Carbon Fibre Suspension Design*, Blue Sky Solar, Toronto, Canada Sep 2014 – Jan 2015

- Designed, tested and manufactured a carbon fibre suspension system for a solar racing car that achieved 26% overall weight saving accompanied with 20% increase in safety factor
- Created a 3-D model of the suspension with Solidworks and ProE, re-designed the joints. Applied FEA test with ANSYS ACP and physical test with Instron tensile test machine. Implemented the design in ANSI Y14.5 GD&T standards
- Selected and ordered carbon fibre, gained hand-on experience with carbon fibre and steel manufacturing

**Product Designer**, *Design of A Self-balancing and Marching Lego Robot*, Peking University, China Sep 2014 - Oct 2014

- Designed and built a Lego robot that can self-balance and march along a given track autonomously
- Integrated modules including color sensor, step/servo motors, wireless network card, battery, accelerometer and gyroscope
- Designed the control system utilizing Matlab Simulink within 1 week. Finished the certain track in 14 seconds, 1<sup>st</sup> in class

**Product Designer**, *3DMC Designathon*, Berkeley, CA Nov 2015

- Designed an assistive mechanical device for people with disability to play the guitar within 24 hours
- Created 3D model in Solidworks. Optimized the design to meet the criteria for 3D printing, assembled and tested the product
- Went through several iteration processes to deliver the final design. Worked under pressure to meet the 24-hour deadline

**CFD Engineer**, *Institut de Mécanique des Fluides*, Toulouse, France Jan 2015 - May 2015

- Implemented numerical simulation and explained the oscillation phenomenon in certain nuclear waste disposal process
- Built a model of drops coalescence containing two reactants. Gained experience in CFD and model construction
- Developed Matlab codes to simulate the balance equation. Tested 500+ parameter combinations to find the critical condition

## SKILLS AND PERSONAL INFO.

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**Software:** CATIA V5, Solidworks, ProE, Matlab/Simulink, AutoCAD, ANSYS, Labview, C, Fortran, R, Minitab

**Language:** Native speaker of Mandarin, fluent in English, basic French

**Other experience:** Teaching assistant, P.E. Instructor of table tennis