



JOY Q ZHANG

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optimist and leader with 4 years of international experience in engineering, user experience design, and building startups

more info at joyqzhang.com

EDUCATION

Imperial College London



Ma/Msc in Innovation Design Engineering, 2021



B.S. in Mechanical Engineering
 Industrial Design minor, 2018
 Highest Honors

TOOLS & SKILLS

VENTURES

- Business canvas
- Lean Startup methodology
- User validation tests
- Product/service pilot design
- Business strategy
- Business model development
- Market research
- Bench-marking
- Pitching/storytelling

UX & DESIGN

- Statistical analysis
- Figma
- Adobe XD
- Photoshop
- Illustrator
- Futures research
- Design thinking
- User research
- Ethnography research
- Human factors
- Design workshop

ENGINEERING

- Solidworks
- Autodesk Fusion
- Inventor
- Matlab
- JMP
- Excel
- JS
- Arduino
- Python
- Rapid prototyping
- Mechanical design
- DOE
- DFM
- Six Sigma
- Overseas manufacturing

EXPERIENCE



Service Design intern

Aug- Oct 2020

London, UK



UX/UI intern

June- Aug 2020

[remote]



Design Engineer temp

May- Sept 2019

Atlanta, GA, USA



CoLab Design Fellow

April 2019

San Francisco, CA, USA



Manufacturing Design Engineering intern

June- Dec 2017

Cupertino, CA, USA & Shanghai, China



Riboud R&D intern

Sept- Dec 2016

Clamart, France



Quality Engineering rotational co-op

Jan 2015- Aug 2016

Auburn Hills, MI, USA

VENTURES / PROJECTS

NewNews chrome extension creator -London, UK

May-June 2020

- Built and published sentiment analysis chrome extension to reduce information anxiety during first lockdown.

FIJI censorship goggles co-creator -London, UK

Dec 2019

- Designed and prototyped functional product with Raspberry Pi and Google Tensorflow object detection.
- One of six Year 1 projects exhibited at 2020 annual Imperial College design engineering WIP show.

Spore surfaces (sponsored by COMPAC) co-creator -London, UK

Oct-Dec 2019

Phase I startup at the Imperial College Wellnovate Incubator for female entrepreneurs

- Designed speculative inorganic-organic hybrid material with probiotic bacteria for the year 2030.

Catcall Control co-creator -Atlanta, GA, USA

April-May 2018

- Built Arduino-based tangible interaction game exploring the experience of street harassment.

Idea to Prototype (I2P) 2nd Place Winner & CTO of "baag" -Atlanta, GA, USA

Jan-May 2017

- Led product development, rapid prototyping, and 33 field interviews to find market trends.
- Won 2nd Best Overall I2P Project at Incubator Showcase, April 27, 2017.
- Designed aesthetic and mechanical encasing of machine vision device for fly pollination trials.

Airship Product Design/Development Lead -Atlanta, GA, USA

June-Aug 2018

Accelerate level startup at ATDC (Atlanta Technology Development Center) incubator

- Directed product development strategy and beta test planning for 3 ecommerce collaborators.
- Led development of 1 manufacturing technique, 4 unique prototypes, and 6 usability studies.
- Strategized feature matrix of solutions for enabling circular economy in ecommerce packaging.

AWARDS

- 2020 Industrial Design Studentship at the Royal Commission of 1851
- 2019 WE-Innovate Imperial Phase I startup
- 2018 Women in Engineering Ford Scholarship
- 2017 1st Place winner of Betchtel Inflatable Scaffold Design Competition (MindSumo)
- 2016 Wohlford Scholar
- 2016 Bill Sayle Scholar
- 2015 GE Women's Network Scholarship
- 2015 Foundation of the Association of Energy Engineers (FAEE Scholar- ship)
- 2015 Women in Engineering Dow Chemical Company Scholarship
- 2014 SanDisk Scholarship
- 2014 School of Civil Engineering Best Undergraduate Research Award (NSF Geomechanics research)
- 2014 Robert Heinlein Scholarship
- 2013 Excelon Corporation Scholarship
- 2013 Zell Miller Scholarship